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TRANSFORMATIONS OF ERBIL OLD TOWN FABRIC

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Tarih: **27/12/2017**

ÖZET

YÜKSEK LİSANS
ESKİ ERBİL KENT DOKUSUNDA KENTSEL DÖNÜŞÜM

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Özet: Zaman içinde tarihi şehirler farklı faktörlerden dolayı değişiklik gösterir. Nüfus artışı, ekonomik durum, sosyal bilinçsizlik gibi birçok neden sıralayabiliriz. Erbil, Irak'ın kuzeyinde olup, tarihi bir kenttir. Kentin planlama ve kentsel gelişiminde en önemli faktör olan tarihi Erbil kalesi ve çevresi şehrin radyal gelişiminde odak nokta ve ikonik unsur olup, 2014 yılında UNESCO tarafından Dünya Mirası Listesine girdi. Eski tarihi kentin korunması ve rehabilitasyon çalışmaları ile bu miras gelecek kuşaklara aktarılmakta ve kentin kimliğinin kaybolmasını önlemektedir. Bu araştırma, kentin tarihi miras yerlerini ve tarihi binalarını, aynı zamanda kenti tanımlayan kültürel ve mimari özellikleri de ele alıyor.

Kentler kültürel, sosyal, ekonomik ve fiziksel güçlerin etkileşiminin bir sonucudur. Kentler, yeni ihtiyaçları ve kentsel politikaları karşılamak için sosyal, ekonomik, fiziksel ve kültürel değişikliklere ve kentsel sorunlara adapte olmalıdırlar. Kentsel dönüşüm, kent mekanlarının ekonomik, sosyal ve fiziksel nitelilerin yoksun olduğu alanlarda uygulanmaktadır.

Bu tez çalışması kentsel dönüşümün mekânsal ve sosyo-ekonomik etkilerini ortaya koymaktadır. Çalışma alanı olarak kentsel koruma projesi olan tarihi Erbil şehri seçilmiş ve bu bölgede uygulanmakta olan kentsel dönüşüm projesinin mevcut durumu, mekansal ve sosyo-ekonomik etkileri değerlendirilmiştir.

Anahtar kelimeler: Tarihi Kentler,Erbil Şehri,Kent,Kentsel Dönüşüm

ABSTRACT

MS THESIS

TRANSFORMATİONS OF ERBİL OLD TOWN FABRIC

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ABSTRACT: The historical cities in a time change with different factors. Like population growth, economical condition, social unconscious as can be listed many reasons. Erbil the capital located in the north of Iraq, a historic city. The most important factor in the planning and urban development of the city, and it was the focus point in the radial development of the city and iconic element is old town Erbil was entered on the World Heritage Sites (UNESCO) in 2014. In order to preserve and rehabilitation of the old historical city and conservation this heritage places and transfer for future generation and to prevent the loss of the identity of the city. This research focusing on the heritage places in the city and historical buildings, identifying the city, also the cultural and architectural characteristic.

Cities are a consequence of the interaction of cultural, social, economic and physical forces.Countries have to adapt to these social, economic, physical and cultural changes,urban problems in order to meet the new needs and urban policies. Urban transformations, economic activity, social urban spaces that have lost their functions and physical qualities.

This thesis study reveals the spatial and socio-economic effects of urban transformation. Historical Erbil city, which is the urban conservation project, was selected as the study area and the current situation, spatial and socio-economic effects of the urban tranformation project being implemented in this region were evaluated.

Keywords: Historical cities, Erbil city, Urban, Urban tranformation

ÖNSÖZ

Tez çalışmam süresince çalışmalarımda bana yardımcı olan, her aşamasında öneri, bilgi ve desteğini benden esirgemeyen sevgili danışman hocam sayın Yrd.Doç.Dr. Havva ALKAN BALA'ya

Tez konumun belirlenmesinde yardımcı olan değerli hocam Dr.Mohammed AL SHABANDER, ve alan çalışmasında herzaman destekte bulunan Erbil Kent Planlama müdürü Baxtiyar Sadraddin ve mimarlık anabilim dalındaki değerli bölüm hocalarıma,araştırma çalışmama yardımcı olan ve benim alan çalışmamın anan taşlarını oturtan katılımcılara

Son olarakta, herzaman benim şanslı olduğumu hissetmemi sağlayan, desteklerini güven ve sevgilerini hiçbir zaman eksik etmeyen değerli aileme teşekkür ederim.

Asmaa Ahmed Mustafa ISMAELOZIRA

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ICONS AND ABBREVIATIONS

Abbreviations

UNESCO: United Nations Educational, Scientific and Cultural Organization
ICOMOS :The International Council on Monuments and Sites
ICOM :International Council of Museums
WMF:World Monument Fund
HCECR: The High Commission for Erbil Citadel Revitalization

1. INTRODUCTION

It is inevitable that the city as a continuously changing organism is in transformation and change. The needs arising from the new actions caused by the social and economic changes in everyday life necessitate the new functions of the city and accordingly the transformation of old town. Cultural heritage sites are by their basic physical and by preserving as a proof of the human condition, are important areas that need to be conveyed to future generations. Cultural heritage sites restrictions introduced for protection, these areas are different from other urban places and specific conditions and need to be defined in the context of the planning process. Cities are not just structures created for the modern world. Cities always sat on the previous foundation. Instead of destroying a previous one, and a reconstruction was carried out on it.So, cities have a history .When historic sites and buildings are destroyed and create irreversible results. Cultural heritage site not only the preservation also providing for the enactment of all stakeholders in the process participant be able to respond to social needs management is required.

The Second World War is known as the beginning of the emergence and preservation of the concept of cultural heritage. With the end of the war, European cultural protection efforts have emerged, especially with the restructuring of economic, political and social organizations in Europe. When the end of the war, European cultural protection efforts have emerged, especially with the restructuring of economic, political and social organizations in Europe. Thus, As a result of initiatives initiated to reintegrate post-war historical, social and cultural values, cultural heritage important evaluations and results have been obtained which determine the general principles and rules of the protection. The most important reason for this development the philosophy of enlightenment born in Europe, widespread awareness of cultural heritage and protection of urban fabric is thought to be related.

Historic urban areas and buildings are important in terms of establishing the identity of cities. For this reason preservation and sustainability historic areas and buildings contribute to the preservation and development of that city's identity. Thus it is of great importance to conserve the cultural and social heritage of Erbil, which has grown from a small settlement at the founding into Iraq’s fourth most populated since it was designated. Settlements and remnants from the past civilizations constitute historical texture in cities. Today, traditional values are rapidly being destroyed, zoning changes, population growth,

industrialization and other factors cause the destruction of the city's historical environment and loosing identity. These deteriorations observed in the cities are beginning an irreversible process in the historical environment. As a result, the historical and cultural values of cities are disappearing.

In order to contribute to the protection of erbil urban identity is of great importance. The work carried out for the protection of the cultural heritage in erbil old town and the results obtained are to protect Erbil's urban identity. The recreational facilities provided by the local physical and social changes for the people of the city constitute another positive aspect of these studies. Besides these positive developments, living change, people living in the field or business owners have also affected in different dimensions.

In fact of heritage it belongs to a culture. Because the heritage, with the perspective of the society has been shaped in time and space. In the past, time-space and values situation, today are lost in the modern city texture. Today, in urban life, people turn to historical places and the tendency to see these places as historical recreational spaces and the remembrance of the lost city identity, to revitalize the owned cultural property are owned. For this reason, it is important to protect sustainability in historic areas. Because as a city's historical sites cultural heritage is the most precious part of community prosperity. For this reason, "by adopting the principle of preservation of inheritance, a city can not only provide a healthy life opportunity; At the same time, helping to recognize the cultural identity of that city "(Tweed and Sutherland 2007).

In the re-emergence of urban identities, old to conservation studies of urban fabric are applied for many years in the world. Changes in the world have been influential in the preservation of historic areas. With the establishment such as adopted in 1964 the Venice regulations, the United Nations Educational, Scientific and Cultural Organization (UNESCO) (1972), the International Council on Monuments and Sites (ICOMOS) and International Council of Museums (ICOM), Citadel of Erbil in this process has been included.

Thus, in our country and in the world, there is a need for transformation, renewal, conservation and restoration projects and applications due to the inadequacy of economic and social development in cities and the increase in population. Urban transformation working is not only a spatial transformation but also a transformation of troubled regions and social and cultural development in the process of transforming cities into new urban

areas. New urban areas to be created as a result of the projects implemented in renewal and transformation areas, the support of the governments and the organizations are needed. (Polat and Erbil 2011) have argued that culture is a key player in the process of regeneration and has become the most remarkable direction in strategies of spatial and social developments of urban policy. They claim that when growth in industrial investment slows down, cultural strategies become a base for cities in image making. This has led to international competition for large-scale development projects among cities.

The Council of Europe was established in 1949, members continue to work on the protection and development of cultural heritage. Main study topics are cultural rights, architectural, archaeological and social and historical heritage **(Council of Europe, 2009).** Worldwide restructuring trials that began in 1950-1960, the Venice legislation were adopted in 1964; First article "historical monument covers not only a certain civilization but also a historic event, including urban or rural settlement.

The concept of cultural heritage and the protection methods based on it made in Athens in 1931 “The Athens Charter for the Restoration of Historic Monuments” is known that the concepts of inheritance and protection first appeared as an international study. The Congress has focused on the preservation of monuments, educational and legal appraisals increasing aesthetic values and restoration techniques of monuments are emphasized. An important result of this congress "National legislation for the protection of heritage in all countries are needed (ICOMOS 2008)

ICOMOS (International Council on Monuments and Sites) was established and commissioned by UNESCO to deal with cultural heritage issues. The council is concerned with the conservation of cultural heritage sites list, plan, topographic map, photo and photogrammetry in the preparation of archives in task description contains (ICOMOS 2008)**.**

Write by Field And Jokilehto in 1993 and updated in 1998 “Management for World Heritage Sites Directory” is used as a guidebook resource in the preparation of management plans. In the guidebook the importance of the concept of inheritance and description by “restoration and preservation, definition of heritage and relation to its surroundings into consideration” the necessity of consideration. (Feilden and Jokilehto 1998).

Another guidebook was prepared by UNESCO “operational guide” World Cultural Heritage List assets states that the necessary work should be done by the state to exist culturally / naturally (UNESCO 2017).

For the conservation and sustainability of cultural heritage sites, it is understood that world heritage concepts were accepted in international conservation legislation in the 1970s. In the 1990s, the concept of management has been explained clearly and information about its content has begun to be given and heritage was planned process within the scope of protection have been emphasized on international platforms. In Erbil, when the conservation date is examined politics, economics, urbanization history can be said that a delayed development of conservation is observed.

1.1 Scope of the Study

Main aim of the study is to establish historical evolution of Erbil old town. The historical citadel of the city of Erbil, which hosts the city's first settlement area, was chosen as a research theme. In this study, in general urban transformation concept, characteristics of urban transformation, examples of urban transformation and urban transformation applications in Erbil old town are compared. Spatial and socio-economic effects of urban transformation planning and development have been determined.

Through the morphology, elements of streets, blocks, and parcels are analyzed in different time periods. Furthermore, typological analysis is used to define the role of building fabric in the morphology of the old city. The study of citadel and surrounded area is both theoretically and in terms of field practice have been discussed. In the study area and the historical citadel of Erbil, the spatial transformation that will be realized through the analysis of the present situation of the region and the urban transformation project implemented in the region, socio-cultural and economic consequences.

1.2 Material of the Study

Erbil city where research was conducted is located in the north-east of Iraq, the converging Tigris and Little Zab rivers in the south, and the Zagros Mountain range forms the northeastern part of the area. The city, which was founded to the south of the Tigris and Little Zab rivers is 390 meters above sea level.

Fig 1.1: Satellite image of the city of Erbil (URL [1])

The borders of Erbil city defines the workspace to be executed. Urban transformation in the old town Erbil consists of two stages. In the first stage Erbil's first settlement, the historical citadel, in the second stage, Three historic residential districts developed surrounding this commercial area; Arab, Taajeel and Khanaqa. The urban structure and land uses of this quarters is similar to the built fabric of the Citadel were included in the transformation project. The work area covering the conversion limits has a total area of 159,81 ha covers. Area of transformation included areas is given in Table 2.1.

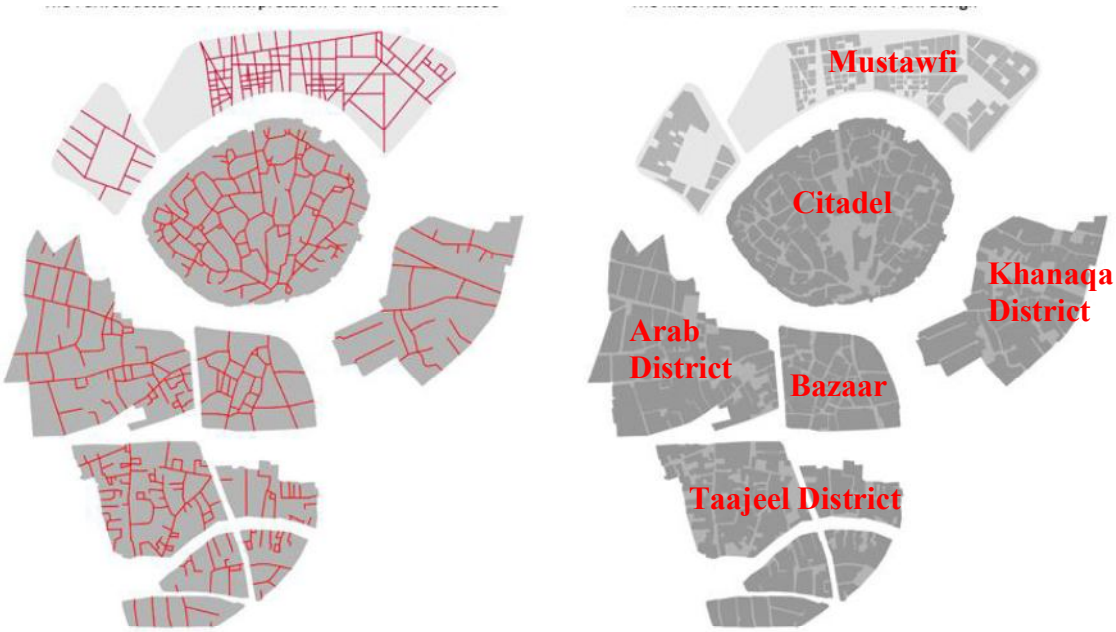


Fig 1.2: The borders of Erbil old city (URL [2])

Location	Area(m^2)
Citadel	110,000
Arab District	182,500
Taajeel District	905,600
Khanaqa District	400,000

Table 1.1: Population and Spatial Size of Settlements Entering the Study Area

In the old city of Erbil, which has been selected as the study area, plans and reports form the basic material of the study. Plans used in the development process of the city and used as material in the study:

- The first known plan of the city of Erbil was made in 1232 and further development plans between 1916, 1944 and 1950 are available. As there is not enough information about plans, the only settlement date on the plan is the castle and surroundings are in the vicinity of the development.
- The citadel and surrounding conservation plans prepared by UNESCO in 2007 are available.

In addition to the plans prepared in the historical development process of the city, numerical data related to maps, satellite images and demographic structure were used in the study at different stages of the research.

1.3 The Method of the Study

In this study, urban transformation in general, features of urban transformation, examples of urban transformation in the world and applications of urban transformation in Erbil old town is compared and research. Spatial and socio-economic effects of urban transformation disciplines of planning and development are researched. The study was addressed both theoretically and as a field application. Socio-cultural,economic and spatial results that will be produced by the urban transformation project implemented in the region by analyzing the present situation of the region. The study was based on literature research on transformation in Erbil old town and on existing thesis studies. As for the analysis of transformation of old town Erbil, data were collected through research with old maps and interviews. In addition to this, the thesis studies which are close to the research topic are examined and summarized and the contribution that these researches can provide for the filling of the observed gaps in the literature has been evaluated. In the study, the research reports and the personal opinions of the experts were used.

2. CONCEPT OF URBAN TRANSFORMATION

2.1. The Concept of Urban

Many definitions have been made in the literature with the concept of urban. But it does not have a fixed definition. Because cities have been show different characteristics according to the measured values. These can be listed as country, region to region, population, administrative measures, functions and cultural values.

Developments resulting from the changing economic structure and global influences have created a new metropolitan lifestyle for middle and upper income groups, which has led to the need to clean up the poor from the city centers and to develop luxury. The conceptual change of the city continued in historical development, in the past concepts such as "cite", "police", "medina". Nowadays, "ville", "city" and "urban" have taken place. Accordingly, the social economic changes in the city have been influenced the change of the concept of the city and used as an important criterion in defining the concept of "fortress" and "citadel" in ancient times. Especially with the industrial revolution, the change of the forms and functions of urban spaces has completely changed the content of the urban concept, therefore different approaches have been demonstrated in defining the city (Topal 2004).

Cities in addition to residential areas where population density is high, includes the organization and staff of the services and activities carried out here. Thus, the city is defined in three different ways, these are modal, functional and both modal and functional. The city in the modal description, while being defined as a large space surrounded by citadel and fortification, in the functional description, they have been defined as trade, industry, law, change and consumption.

Both modal and function in the city the concentration of the population, as well as the accumulation of city and the processes of industrialization and consumption can be specified as the space of increased expertise and hierarchy (Ertürk and Sam 2016).

As a result, the concepts of the urban different approaches and definitions have been made in terms of format and features. In general urban is a high population density, transportation, accommodation, work and entertainment and infrastructure of built environment.

2.2. The Urbanization Concept

The process of urbanization takes place in many countries in different ways and urbanization process has been taken up in different forms in regions. Tekeli described the urbanization in two ways: Firstly, urbanization is defined as the concentration of a population and the size of a population and the heterogeneity of the population in non-agricultural activities; secondly, the adoption of values, behaviors and attitudes that can be called "urban culture" is seen as urbanization. (Tekeli 2011)

Rusen Keles describes urbanization expressing push and pull effects are a population movement. Pushing factor driving the population from one place to another, like from village to city. The pull factors are a developments and opportunities in the cities, like the social and economic factors that attract people from the village to the cities.

Urbanization is a concept that expresses the process of migration from village to cities due to economic, social and psychological reasons and the adaptation process of economic, social and psychological direction to urban culture.

2.3. The Urban Transformation Concept

Urban areas need change due to physical, social, environmental, economic factors. These changes and transformations sometimes increase the quality of life and space, sometimes they cause economic, social, environmental and physical deterioration of the place. The concept of urban transformation emerged to prevent these distortions in cities.

Moving from these definitions, urban transformation can be defined as the introduction of a style other than the arrival of urban areas, or another situation.

By changing the existing features, urban transformation would be thought of as another style form. However, urban planners describe urban transformation as a change in the internal structure of existing parts of the city and in relation to other settlement units (Tarkan 2007).

If cities are considered as living organisms then there is a constant need for innovation and change. Cities constantly grow, so it is not immediately known which function will be replaced in a constantly changing city. the reason of this, the immovable urban structures that exist in the city, the economic and technological life of the city is long (Tekeli 2010)

(Roberts and Sykes 2000) argues that "urban transformation is a comprehensive and integrated as a vision and action, the economic, physical, social and environmental conditions of an area to try to ensure continuous improvement .

From these definitions, the way of urban transformation; As a whole, strategies and actions aiming at comprehensive development of the economic, social, physical and environmental conditions of the urban area with collapse and deterioration can be identified.

Urban transformation is expressed as a comprehensive vision and action that aims to provide a permanent solution to the economic, physical, social and environmental conditions of a diverting region in order to solve urban problems (Thomas 2003).

According to (Thomas 2003) urban transformation, Providing solutions to urban problems and to the economic, physical, social and environmental conditions of a territory undergoing a change. A comprehensive vision and action that tries to provide a lasting solution (Ocak 2006).

According to Turok, urban transformation have three important characteristics (Turok 2004)

- “Aims to change the nature of a place and include people in the process
- It includes a wide range of objectives and activities that intersect the basic functional responsibilities of the state, depending on the specific problems of the region and potential.
- The private institutional structure of the partnership includes a partnership structure that varies among different stakeholders.”

Urban transformation is a compromise on the outcomes that arise from the need to better understand the processes of urban degradation and which will be achieved. In other words, the redevelopment and revitalization of a lost economic activity is the re-

establishment of an unfunctional social function, the reintegration of social equilibrium in areas of social exclusion, and the restoration of this balance in areas where environmental quality or environmental balance is lost (Roberts and Sykes 2000).

The urban transformation of a city outside the current life standards to solve the problems facing the areas economic, social and spatial covers all kinds of interventions realized in meaning. Transformation fields Slum and extreme concentration of illegal apartment buildings, urban decay areas such as old factories or ports, historical the building is intensive and the town center areas that have entered the process of corruption and can be defined as urban areas that have filled their economic.

Urban transformation projects should not only be used to solve the problems of problematic urban parts but should be considered as a comprehensive and integrated process spreading all over the city.

One of the most important factors determining whether there is a need for urban transformation in a certain settlement area is the lack of urban needs. The lack of urban needs subclass groups living in unqualified physical surroundings of the city and having economically weak financial conditions, the specific services that the community they do not take advantage of the same rates, a certain amount of social expressed as exclusion. In the case of urban poverty, this is an important factor that indicates the need for urban transformation (Özden 2008).

The transformation in the cities is affected by social, economic, cultural, environmental and political factors. The direction, form and quality of the interventions made with urban transformation are variable. (Gulersoy and Gurler 2011) have divided urban transformation into three major categories:

- Heritage conservation-based urban transformation
- Regeneration-based urban transformation Redevelopment-based urban transformation

Urban transformation is an integrated strategies and actions aimed at improving the collapse and decay of urban areas and economic, social, physical and environmental conditions. Transformation engages in the planning and management of existing urban areas (Akar 2006) .

When the concept of urban transformation is examined In the face of the rapid population settling in a certain area over time, the inadequacy of urban services and therefore the economic collapse of the area, lack of conservation of historic areas

physically, socially and economically to made more livable is targeted to more planned. However, in 1980s, it revealed the breaking point when the concepts of globalization, competition and sustainability became new planning norms and strategies. Thus, it focused not only on the physical aspects of urban areas but also on the unification of social, economic, environmental and technological factors as well (Erbas and Erbil 2013).

(Clerici and Mironowicz 2009) have described urban transformation as a "modern" feature of a city. They argue that cities change; thus, their urban forms adapt to these changes in order to reflect the cities' social structures.

The definitions of urban transformation differ according to the vision, purpose, strategy and methods they emphasize. refers to the whole of the strategies and actions implemented to improve the economic, social, physical and environmental conditions of the urban area with urban transformation, degradation and collapse through comprehensive and integrated approaches.

2.4 Purpose of Urban Transformation

According to (Erbas and Erbil 2013), urban transformation is a process to reintegrate battered, out-dated, malfunctioning and economically exhausted regions within the larger context of a city. The process consists of a set of strategies and actions followed to enhance social, physical, economic and environmental urban conditions through the implementation of integrated and comprehensive approaches. In other words, it re-improves and regenerates an out-dated region in order to re-establish harmony where economic, social and environmental quality or balance is lost. Nevertheless, urban transformation varies among regions in regards to their proposed visions, strategies, objectives and employed methods.

Urban transformation cannot be only restricted to the transformation of a physical space, other aspects such as social, cultural, economic, and environmental should also be embodied in the process. Further, they divide urban transformation into four fundamental dimensions: physical space dimension (involves transportation services in that specific region, housing, technical and environmental problems); planning dimension (involves spatial plans and modification of transformation zones); economic dimension (relates to enhancing employment opportunities along with its quality and quantity); social dimension (includes public and private partnership, accessibility to public services (Erbas and Erbil 2013).

Urban transformation applications urban growth, urban function balances constantly changing positive socio-economic structure of the city takes care of creating new

environments that will affect. These areas can be created, social, economic and physical purposes (Baransu 1989).

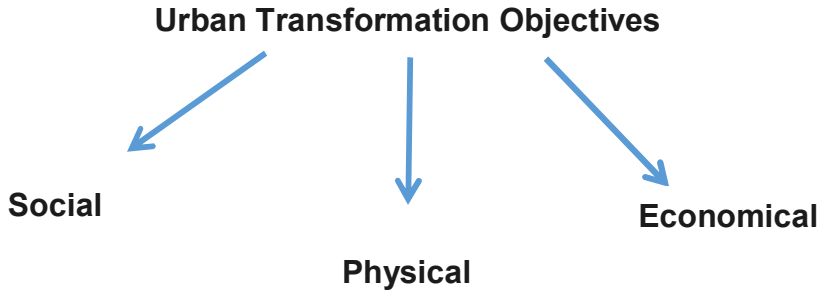


Fig 2.1: Urban Transformation Objectives

Social objectives of urban transformation; In order to achieve the standards that make living spaces healthier and safer, to prevent urban areas from becoming depressed and to ensure participation of different segments in planning.

A person who socializes by living in an environment that carries past signs will easily become conscious of cultural continuity and will have a history of consciousness. The continuity envisioned here is to carry the symbols of the past in new life, not the same as the past (Tekeli 1987).

Physical objectives of urban transformation; To remove the problems of corruption in the fields of life, addressing social infrastructure problems in the region, balancing density. Getting transportation problems, to prevent urban sprawl and to respond to the need for change in the city is to give.

Economic objectives of urban transformation; Revitalize business life by reducing economic imbalance in the city, to bring the ruined city parts back to the city, put forth economic models that increase the quality of life.

As urban projects continue to implement, current users of project sites leave the center of the city, and these areas are left without maintenance. In the urban transformation projects, the area to be converted firstly must be determined correctly, if the area has urban problems in the city inhabitants may be possible to mention a need for transformation in the field. Infrastructure conditions of the area are not suitable the vacancy rate of the building is high, but have great advantages in terms of historical environment potentially both economically and socially in the case of finding benefit is

considered as a correct approach to treat the area as a transformation area and bring it back to the city (Özden 2008).

Urban transformation projects, especially in 2000's begun to be implemented with the support of local governments and organizations so created a positive image in terms of improving environmental quality. The main purpose of the urban transformation, only physical healing not at the same time reduce socio-economic inequalities.

Each renewal and transformation decision have advantages and disadvantages. It is necessary to be aware of what is going on in the transformation projects. Transformation projects are transparent, accountable; participatory should be dealt with by a planning process makes integrated (Tekeli 2010).

Urban transformation is a concept embracing four basic dimensions.These;

- **Physical dimension:** It deals with transport links with the city in which the region is located, housing stock, technical and social infrastructure and environmental problems.
- **Design dimension:** Includes the urban design process that directs the development, change and conservation of the city plan physically.
- **Social dimension:** Access to health, education, housing and public services, crime, exclusion from society, the public and private sectors of the project process, participation of local people and volunteers.
- **Economic dimension:** To improve the quality and quantity of business opportunities in the selected area and vicinity (Polat and Dostoglu 2007).

As a result, aim of the urban transformation projects bringing those regions back to the urban economy by removing the obstacles or threats to the needs of today's cities, to prevent social problems and to make the city's physical space suitable for contemporary life conditions.

2.5 Urban Transformation Methods

Different urban transformation applications have been made in the world. Institutions or organizations that carry out urban transformation projects address issue for different purposes and the application also have different characteristics and cultural values. Historical, cultural and social values must be considered when making the transformation. However, in this way a successful result is achieved.

Urban transformation is applied in different forms and therefore shows differences in concepts. These;

2.5.1 Redevelopment

In the city, buildings that have lost their functionality reuse of weak areas in the social and economic direction. Main purpose in, to identify the sources of the problems in the urban areas that have suffered the collapse and to produce solutions and thus revitalize the urban area.

Redevelopment, seriously deteriorated and unsustainable structures is an accepted approach in areas where. The redevelopment method is to take the settlement areas of existing people to a different area. This method carries heavy social and environmental costs.

2.5.2 Rehabilitation

Rehabilitation refers to the compilation and restoration of a place into healthy living conditions. Rehabilitation is a worn over time Increasing in density and unable to function is a way of making the regions worthwhile. Preservation of existing area is based on restoration and repair method. Government and public support for rehabilitation work are also high.

The beginning of the deformation is defined as the return of old parts of the city, which have not yet lost their original character, to their original state (Özden 2001).

2.5.3 Gentrification

For the first time by Ruth Glass at the end of the 1960s in the city center of the British natives living in the city, the illegal housing areas of the working class this concept has been formed after the settlement. Gentrification defined as the placement of middle and upper income groups in residential areas by the lower income group which is renewed through physical intervention (Sönmez 2006).

Gentrification is not an isolated process of neighborhood change is an integral part of the wider process of urban political, spatial and economic reconstruction, including the rehabilitation of housing areas in inner cities (Sakızoğlu 2007).

It is a concept that involves the physical and social change that occur in the socially and culturally collapsed places, the place of the upper class people in social-cultural terms

rather than the people who are economically in the lower class group (Smith and Williams 2016).

2.5.4 Integration

In this way, while the urban identity is being protected, new buildings a rich environment is created with the participation, the main inhabitants of the region, conversion has contributed. It is the method of building new buildings without touching existing structure and preserving integrity (Göz 2008).

2.5.5 Urban Transformation

Urban transformation is defined as the re-planning and implementation of existing cities and centers to remedy and adapt to the needs of the day. Social, cultural, economic or urban areas that are undergoing a depression process from physical, the city can't respond to its needs or Reviving that area again is called urban transformation method of animation (Sözer 2008).

Abandoned is the method of maintaining the vitality of historical buildings and urban structures that are used unhealthy and intensively by low-income groups in cities separated by functions such as storage, production or housing. In the case of economic and physical collapse and urban conservation areas that have lost value in terms of social prestige, elimination of infrastructural and social problems, transportation problems solution, reconstruction and reuse of historical houses and structures Is the method applied to eliminate today's needs (Ahunbay 1996).

Urban transformation should include social and economic programs. Urban transformation is one of the comprehensive policies to improve the economic competitiveness of the city and its socio-economic conditions. Transformation practices are common in Europe and the United States is one of the methods used (Özden 2008).

2.5.6 Urban Conservation

Conservation, Social, economic conditions and culture integrates contemporary societies with contemporary societies and prevents them from changing their physical structure reflecting their values.

Historical, architectural and visual values of the scientific method and protection by techniques, the functioning of the country, the historical region, the city, the urban areas

to be protected in accordance with the planned development line, the maintenance or replacement of the old function, solving problems related to social structure, providing necessary living standards, infrastructure services and health issues with the surrounding area of the taking into consideration has related many actions (Ocak 2006).

2.6 Urban Heritage and World Heritage

All of the important cultural and architectural values preserved from past to present represent the heritage of that community. Heritage is “A past generation has preserved and handed on to the present and which a significant group of population wishes to hand on to the future” (Alsayyad 2001).

World Heritage is refer to a resource with outstanding universal value that is rare, and non-renewable and transmit to future generations (UNESCO 2017).

Historical area in developing countries represent an essential advantage because such countries are still considered to have a non-industrialized environment that offers a non-spoiled paradise in comparison to those from highly economically developed countries (McGuigan 2005).

In 1972 the "Convention on the Protection of the World's Cultural and Natural Heritage" was adopted by UNESCO and entered into force in 1976 and has since been ratified by UNESCO's 185 state Parties (UNESCO 2009).

The main goal of the convention published by UNESCO;

- Identify
- Protect
- Conserve
- Natural and cultural heritage

While cultural heritage is concerned about the built environment and cultural events associated with people, the world cultural landscape contains cultural properties that “combined works of nature and of man” (UNESCO 2017).

In order for a site to be included in the World Heritage List, one of ten selection criteria must be met. In addition to have at least one criterion from the selection, sites must also meet the requirements regarding their authenticity, integrity, protection and management. Selection criteria for World Heritage Site status as follows;

(i) To represent own unique structure

(ii) To exhibit a significant change in human values over a period of time or in a cultural field of the world on architectural or technological developments, monumental arts, urban planning or landscape design;

(iii) Bear to a cultural tradition or a unique or at least exceptional testimony to a lost or which has disappeared civilization;

(iv) To be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history

(v) A traditional human settlement representing a culture (or cultures) is an extraordinary example when land use or sea-use or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change

(vi) To be directly or tangibly events or live traditions, ideas or beliefs, artistic and literary work of exceptional universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);

(vii) Contains superior natural phenomena or areas of exceptional natural beauty and aesthetic significance;

(viii) Life-changing, extraordinary examples representing the main stages of world history, including important geomorphological processes or important geomorphic or physiographic features in the development of the earth;

(ix) To be outstanding examples representing of ecological and biological processes that continue to be important in the evolution and development of terrestrial, freshwater, coastal and marine ecosystems and communities of plants and animals;

(x) To include the most important and important natural habitats for on-site protection of biodiversity, including extraordinary universal values threatened by science or conservation.

While UNESCO claims that it is a world heritage that must be protected as a whole by the international community, the world heritage in practice is neither protected nor protected by any world government; the local community actually manages it. Independent of the protection of the international community, UNESCO does not have executive authority. It is inevitable to offer an independent intervention to the economic

use; physical management and accessibility conditions of the World Heritage recognized world community (Xiang 2009).

According to (Black and Wall 2001), in developing countries one typical step in the process of conserving and creating a site for tourists often result in the removal of existing people and houses surrounding the monument. This implication can be overwhelming to local people. It can deprive them from any opportunities to benefit from tourism and also modify their traditional subsistence. Furthermore, not only land loss and lifestyle changes, but also inadequate compensation for relocation and failure to provide an alternative means of subsistence may raise frustration and resentment among displaced people.

2.7 Urban Transformation in Historical Town Centers

Historical urban textures are spaces arranged on a human scale reflecting the social, cultural and economic structure of past civilizations, life philosophy and aesthetic concerns. The realization processes of the urban transformation projects and their relation to the social-spatial structure conflict with different urban transformation models. Gentrification, revitalization and transformation methods are generally used in the depression areas of the city centers.

Urban conservation is in the domain of urban renewal and there is a close relationship between them. These are areas where most of the urban transformation requirements are clearly felt in the old city centers. Urban transformation is needed because of the obligation to protect old and original identities of urban centers, the first structuring area of the city.

Urban centers are generally encountered as historical centers, which have become mostly depressed areas, and urban transformation method is applied today in order not to lose the architecture social and historical features. The foreground architectural cultural and historical features and these physical features provide integrity in social economic life, Areas where the sustainability of urban texture is formed is called the urban protected site. The urban protected site is harmonious order of old cities, architectural integrity able to protect streets, neighborhoods or areas.

The causes of destruction of historic city centers can be listed as follows:

- Changes in social and economic life conditions
- Unconscious intervention
- Wrong restorations
- The lack of awareness of the historical environment, the inadequacy of conservation education

- Lack of protection plan and unconscious implementation
- Reluctance and indifference of local governments, inadequacy of resources
- Rapid technological developments break ties to the past

Historic castle in Erbil has great importance both in the city center and the first residence center. The castle in the old city center is at the forefront with its street and architectural structures. But over time these historical and cultural values lose their qualities over time.The fact that the local government does not implement the protection policy leads to the disappearance of urban centers where historical sites are concentrated.
(Papageorgiou 1970) system for the classification of historic centers explains their relation to historic buildings and settlements;

- Settlements represented by independent and monumental building groups; in this group, building groups such as historic citadel, monuments, palace, fortifications are included. They can be found on their own or near a settlement center.

Fig 2.2 Possible settlement of the monument (Baytin 1994)

- Small rural historic centers; such settlements are isolated due to their geographical location and the original urban texture is preserved
- Historic cities; are medium sized cities that have been able to protect their development, urban texture, and their climates day by day.
- Historical centers had 5 possible shapes in the cities; They can be located in the city center, on an important waterway passing through the city, next to important monumental groups in the metropolis, next to an important green area, or in the city's new centers (Baytin 1994).

Fig 2.3 Possible settlement of historical sites in big cities (Baytin 1994)

The preservation of historical city center has been seen to be harmonious with the environment as well as dynamic in social economic and cultural relations. The purpose of conservation and renovation of the historic site, these ones;

1. Sustainability of historical background
2. Improving historical centers and ensuring harmony with the environment
3. Revitalization of depressed historic centers
4. To prevent the loss of identity
5. Revival of the economy

The historical city is the center of existence. It is necessary to prevent the loss of the values in the historic city centers which are the first place of the city. To ensure sustainable development, is of utmost importance in urban protection and renewal. For this reason, It is necessary to make decisions that will provide continuity in approaches such as functionalization and continuous maintenance and repair. Society's past personality, social, cultural and economic these areas that reflect the elements must be prevented from destroying and disappearing under the changing needs of today's conditions without losing their physical properties. Urban transformation can therefore be regarded as the right method, because it serves the purpose of the transformation of historical city centers into social, economic and cultural benefits.

2.8 Urban Morphology

Urban morphology studies presents the urban texture data developed in the historical process. Urban morphology, the structure of settlements, the formation and transformation, the spatial is the approach that constitutes the stages and settlements character traces in history. In this context, city morphology is used as an important method in determining the periods in which cities have experienced in history and the changes that take place in the city. City Morphology; a description of the format adds all of the empirical facts to the account, quantitatively by means of observation (Rossi 1987).

In this thesis, theoretical research was carried out with typological and morphological examination. Morphological analysis thoroughly analyzes the physical evolution of streets, blocks and parcels. The typological concept explains the physical properties of building fabrics based on functional and formal type configurations in micro scale analysis.

The morphological approach is systematically characterized by different elements (organization and development over time) and associations with space. These factors are due to historical development and functional requirements. The development of the urban morphology as an independent scientific discipline, which constitutes an element of urban construction, and its use as a method in the analysis of its physical structures came into conflict in the first half of the twentieth century (Whitehand 1986).

The main morphological elements can be listed as streets, open spaces, buildings, parks. these elements must be constantly renewed because they are used all the time. From this point of view the city is being renewed as a living organism.

Based on geographer and planner M.R.G.Conzen, who started to examine morphology in the late nineteenth century, the morphology is expressed in the townscape, building fabric and pattern of urban land use. Townscape is the combination of town plan, pattern of building forms, and pattern of the urban land use. "Building fabric is the actual three dimensional mark of physical structure on the land ownership parcel." (Kostof 1991).

According to Conzen, “the town plan divides into three components: the arrangements in the streets and the street system, the gathering in the streets and the street blocks, and the block plans of the buildings” (Conzen 1960).

The physical analysis in the environment requires from the perspective of the place, then the physical, social and economic infrastructure and the historical process. The historical development of the area, the changes, the growth of the area and the morphological development of the area are included in the historical analysis. Urban texture analysis helps shape urban development.

Buildings, particularly the land uses they accommodate, are usually the least resilient elements. Although more enduring, the plot pattern changes over time as individual plots are subdivided or amalgamated. The Street plan tends to be the most enduring element (Carmona 2001). Many components are needed for the formation of city morphology. These components are attributes that determine the properties of the region. These;

- Building densities, settlement density of open and closed areas
- Green area
- Street views, road ratios
- Node points

The purpose of establishing the cities is to influence the morphology of the city. Placement formats are only affected by enterprise reasons and during the examination of some city plans, these reasons are the most important feature. However, in addition to the reasons for the establishment affecting the settlement form, some other situations can also influence the city's character (Baykan 1969).

The reasons for the founding of the cities and the social reasons for the urban growth were the following advantages of the city;

- Social and economic reasons,
- Education
- Entertainment
- To comply with today's living standards
- To adapt to the urban environment

3. METHODS AND EXAMPLE ON THE WORLD

In this part of the study, examples of urban transformation in the world are discussed. Reasons for selection of these samples; transformation of historic urban center areas have projects. The Old City of Erbil is also similar to these examples because it is an important historical value and a transformation area.There are many application methods of urban transformation in the world. With the industrial revolution that took place in the middle of the 19th century in the world, the structure of the cities started to change. Countries have been restricted due to financial reasons and have been created as high-density, unhealthy settlements as life-styles. These areas, due to collapse problems have become targets for urban transformation. The first urban transformation actions, rapid industrialization, migration from urban areas to rural areas and the spread of urbanization out of the city, began with the cleansing of depressed areas have been subjected to criticism on the grounds that poor people are in many places to solve their housing problems (Özden 2008).

From the second half of the 1940's the urban development strategy seems to have been implemented. The early years of the 1960s and 1970s were the years in which urban improvement and urban transformation began to be implemented. In this period, urban improvement and transformation projects that are more sensitive to social problems and area-oriented have been developed. Urban transformation is important in terms of

accepting the necessity of addressing both physical space and social dimensions together (Akar 2006)

At the end of the 1990s the most common type of intervention used as urban transformation is urban regeneration. In addition to the public and private sector, voluntary organizations and new regulatory and urban transformation programs have been developed (Akar 2006).

Urban transformation in less developed and developing countries, such as urbanization, unplanned growth in the country, illegal construction, inadequacy of applicable laws or impossibility the effects on urban space stands out. (Özden 2008).

The subject has been dealt with in detail by looking at examples made in the world;

3.1 Lebanon Solidere (Beirut Historic City Center) Urban Transformation Project

The first steps have been taken for transformation efforts in order to destroy the traces of civil war in Lebanon. To wipe out the traces of warfare in people's minds, Beirut's traditionally administrative, commercial, and cultural heritage the central zone that creates it needs to be renovated. Together all these concerns, in order to develop and reconstruct the Beirut central region in 1994 Solidere (The Lebanese Campaign for Development and Reconstruction of the Beirut Central Districts.a.l), a joint-stock company of investors, has been established (Todmori 2004).

The problem in Beirut after the war is not only the physical structure, but the social structure has been damaged to a great extent. The fact that the city has been divided into two in a way that does not fit the traditional identity of the city was led to a segregation based on religion, contradicting Lebanon's efforts to become a post-war nation. One of the main aims of the transformation in the field is to integrate the social documen of the city. To achieve this goal, the city center was renovated and the eastern and western sides of the city were interconnected, and the center met all the cities with the social and cultural activities and trade there, so that the residents of the city would meet here (Eres 2004).

Transformation project damaged during 15-year civil war, the reconstruction of the traditional city center of the city of Beirut, to attract commercial activity to this region and the capital of Lebanon's heart aims to acquire space in the context of the city (Douaidy 2003).

Main objectives of the project as follows

- Restoration of historic buildings and conservation areas,
- Determination of urban design for newly developed areas
- Delivering the sea view to the maximum level throughout the project area
- Ensuring the integrity of the urban area with the sea
- Provision of infrastructure system
- Creation of public spaces, viewing terraces, construction and organization of excursion sites and pedestrian paths,
- Ensuring the preservation of post-war robust buildings
- Re Establishes the fabric and neighborhood structures accommodating a broad mix of land uses ranging from business and institutional to residential, cultural and recreational facilities.
- Create harmony between modern and traditional architecture building,
- The reconstruction of the city's texture,
- Creates a vibrant, 24-hour active downtown
- Create magnet-influenced attractions for the renovation of the city center,

The project, which covers 191 hectares and 4.69 million square meters of construction area, consists of two phases. The first phase covers the years 1994 - 2004 and the second phase covers the years 2005 - 2020. Application of both phases processes are carried out by the Solidere Company, a semi-private and autonomous entity established by the Lebanese government. As of 2005, the first stage of the project was completed and no faults were encountered. Public-private in the success of the project the share of sectoral cooperation was great (Demirsoy 2006).

The importance of Beirut for urban transformation can be explained as follows:

- The easternmost point of the Mediterranean basin is the harbor atmosphere, the new airport,
- Liberal politics, economic system and free press opportunities,
- Advanced banking sector
- The strength of the education and health sectors and the high level of education of the employees
- Social texture formed by different ethnic groups, British, French and Arab unity
- Create archaeological and cultural backgrounds makes the region more valuable.

Fig 3.1: Lebanon Solidere Urban Transformation Project (URL[3])

The project is important for the disappearance of the texture and identity of the city. As a result, sustainable urban space has been created and transferred to future generations. The foundation of urban identity, the historical past of the city, and the cultural diversity that surrounds the city formed by this historical past, the past world system determines the location and characteristics of its interior.

3.2. Potsdam Square in Germany Urban Transformation Project

The Potsdam square in Berlin, Germany's capital city, it is one of the famous squares of Europe. During the war destroyed and after the war, it was divided into two by staying at the border of eastern and western Germany. The Postdam square, remembering the pre-World War II significance in order to recover the lost value of the square was created a subject for conversion studies. The Postdam Square Project is a multidisciplinary, large-scale urban transformation application, suited to the pre-war challenge, under the influence of the Berlin Senate (Demirsoy 2006).

Along with the demolition of the wall, the soulless straightforward and horrific Postdam square in the middle of Berlin has been sold to large companies such as Daimler Benz, Sony, in order to take part in the private sector in the transformation project. Potsdam square urban design competition was opened to create a metropolitan center consisting of shopping centers, cultural buildings, small businesses, residential areas and office areas.

The Urban Transformation Project of the Postdam Square, there are functions for providing economic activity such as movie theaters, shops, restaurants, cafes, theaters and hotels for 3,500 people. As well as, multifunctional urban areas such as residential areas

will appeal to upper and middle class. Thus, aimed to continue the historic touch of the transformation project and to develop the city with the economic development in the area.

Fig 3.2: Potsdam Square in Germany Urban Transformation Project (URL[4])

3.3 Antalya Kaleiçi Urban Transformation Project

The transformation project initiated in Antalya City Center in 2005 The "Central Conservation and Transformation Region" located in Antalya Kaleiçi Culture and Tourism Conservation and Development Zone has been started to be implemented with the approval of the local government.

Antalya Metropolitan Municipality aims to re-plan the historical Kaleiçi, Balbey and Hasim işcan neighborhood in a whole. As a result of the transformation project to be implemented in Kaleiçi, work was started to make Kaleiçi enter the world cultural heritage list (Ulueren 2007).

The area also has 71 monumental buildings,56 wells, 93 protected gardens, 25 monumental trees and 473 civil architectural buildings. With the urban transformation project is aimed to develop the region by preserving the existing texture in Kaleiçi and strengthening (Anonim 2006).

Kaleiçi city centers has been unable to respond to today's needs. At the beginning of these, we can list the problems such as the turns into an unprotected, depressed area, inadequacy of park areas, so have been affected in tourism due to the problems encountered.Kaleiçi

is not used by the locals even,the use is proceeding directly into the transformation process into an unsuitable collapse area.

Antalya is a fast growing tourism city, many economic activities for tourism planning, city residents living in the city have moved away from the city center, by going out of this way, the city will live in the urban center and gain the identity of the city, so Antalya municipality opened competed a center to serve a tourism city. With this assessment, history-past renovations to development-innovation to the protection rules that will not stop and prevent them are also taken into consideration. Antalya city, which constitute the most important part of commercial, tourism and administration to make it a point of attraction and at the same time to preserve the cultural and natural values it possesses and understood that applications should be made accordingly (Gül 2006).

Antalya Kaleiçi urban transformation project by removing the functions lost in the city center and congestion of city center instead of the city center introducing regulations that support traditional center identity, a region with a traditional texture for the city is important to try to get it back.

Fig 3.3: Antalya Kaleiçi Urban Transformation Project (URL[5])

3.4 Aleppo Citadel Urban Transformation

The citadel Aleppo is second largest city located in Syria and a large medieval fortified palace in the center of Aleppo. Also, it is considered to be one of the oldest and largest citadels in the world, the castle dates 3000 BC has been in existence.The citadel which has been built on a natural limestone hill and it was also surrounded by a moat filled with water to protect against intruders. In the citadel occupied many civilization Greek,

Byzantines, Ayyubids, and Mamluks and Ottoman, the majority of the construction as it stands today is thought to originate from the Ayyubid period. Since 1986 was included UNESCO World Heritage list.

Fig 3.4: General view (URL[6])

The Citadel of Aleppo is a very large complex containing a series of buildings and monuments with different historical features, this is the bridge and the main gateway; the ring walls and the towers; the mosques; the cisterns; the palace complex; the arsenal; the hammam; the barracks; the tunnels; and the new theatre.The Citadel has an elliptical base with a length of 450m and width of 325m, at the top this ellipse measures 285m by 160m with the height of this slanting foundation measuring 50m (URL[7]).

Fig 3.5: General view from northeast (URL[7])

Fig 3.6: Citadel Entrance (URL[8])

In 1999, the Organization of the Aga Khan, sponsors of arts and culture, in collaboration with the Ministry of Antiquities and Heritage and Kaplan and Wilson Karndt, prepared a projected with the aim to rehabilitate the citadel and to turn it into a city for pedestrians. The project also includes the integration of citadel between the preservation of historic buildings and urban life. Urban transformation in the citadel has changed the function of some historical buildings in the field and some buildings were restored and continued to be used with the same function. Preservation of the urban fabric on the citadel's perimeter, during the repairs and restoration of heritage houses and palaces, according to their era, materials and design and re use the function as cafeterias or restaurants to serve tourists and visitors.

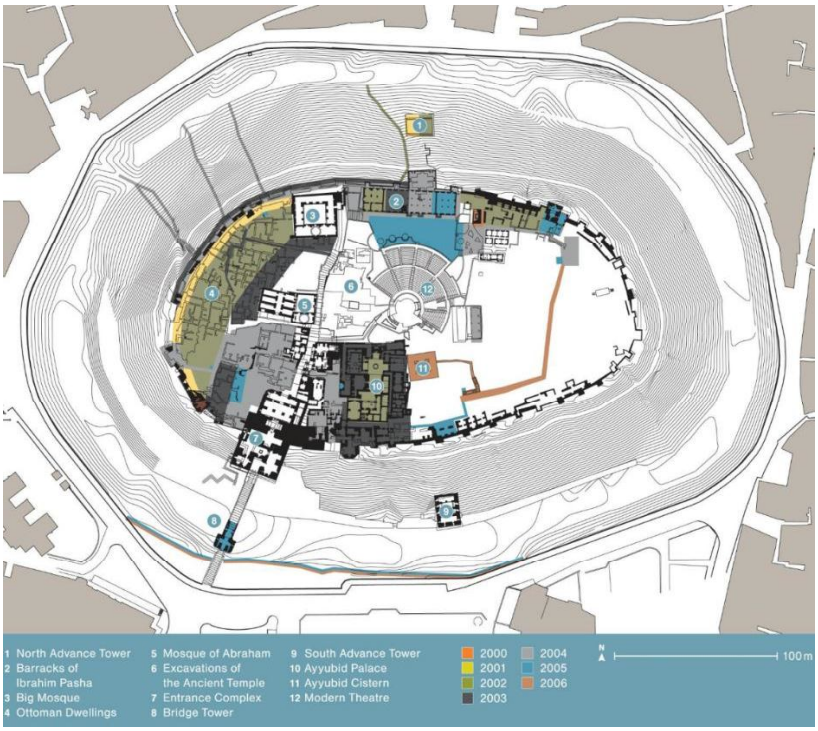


Fig 3.7: Aleppo Citadel Plan (URL[9])

The citadel and the city, its integration with the surrounding urban fabric, the urban centre and the legislations that have been taken for the development of the citadel were considered correct procedures, in terms of maintaining the heritage environment and increasing the link to the city's citadel. Both the historical texture has been preserved and the city's social, economic and cultural development has been helped (Akram, Ismail et al. 2016)

Fig 3.8: Aleppo Citadel After Transformation (URL[10])

Today, preservation of natural, historical and cultural heritage, improvement of low-quality urban areas are facing of urban transformation problems, such as new construction sites that rapidly develop without considering the existing urban and natural texture. Rapid development in the world is also affected in our country. Thus, the city of Erbil also has faster transformation processes. It is the actors who pioneered the development of urban transformation interventions, public organizations, market and private individual organizations. The most negatives of the area would be reduced by the government by determining the principles for urban transformation problems. These principles should be listed as, sustainability, equal access to opportunities, complying with the environment and Today's needs and quality of life are the same. In the implementation of these principles the role of the local government is very important. However also important that not only the local government but also the local people participate. As a result, the application of urban transformation differs from country to country, because of the historical, social and cultural value. So, each country must carefully maintain its experience in the framework of its local, economic, political and social programs.

4. CASE STUDY ERBİL OLD TOWN

In this chapter of the study, detailed information would be given on the general features and significance of the Erbil old town.

4.1. Geographical Location

Erbil is one of the cities of Iraq; it's located on the north part of country and the fourth largest city in the country after Baghdad, Basra, and Mosul. Erbil is the capital of the autonomous Region of Kurdistan within the Federal Republic of Iraq. About 350 Km from the capital Baghdad and the area about 13,165 km2. International borders: Turkey, Iran. Population in Erbil 2 million. The governorate is bordered by the converging Tigris and Little Zab rivers in the south, while the Zagros Mountain range forms the northeastern part of the area. The citadel town of Erbil lies in the middle of the Greater City of Erbil. Although it is now completely engulfed by the huge expanse of the modern city it still lies at the heart of the busy central commercial district. The overall form of the citadel town is elliptical. The citadel of Erbil is a tell or occupied mound, it rises some 30 meters above the ground level of the lower city. Its long diameter is about 430 meters and its short diameter is about 340 meters. Its overall area is 102,000 m2 (URL[11]).

The city has played an important role in economic viability because the region is the capital city. It is connected to the neighbor countries by several roads: to the east, through Koya and Sulaymaniya, it is connected to Iran. To the north-west, it is connected to Syria and, through Duhok, and then to Turkey.

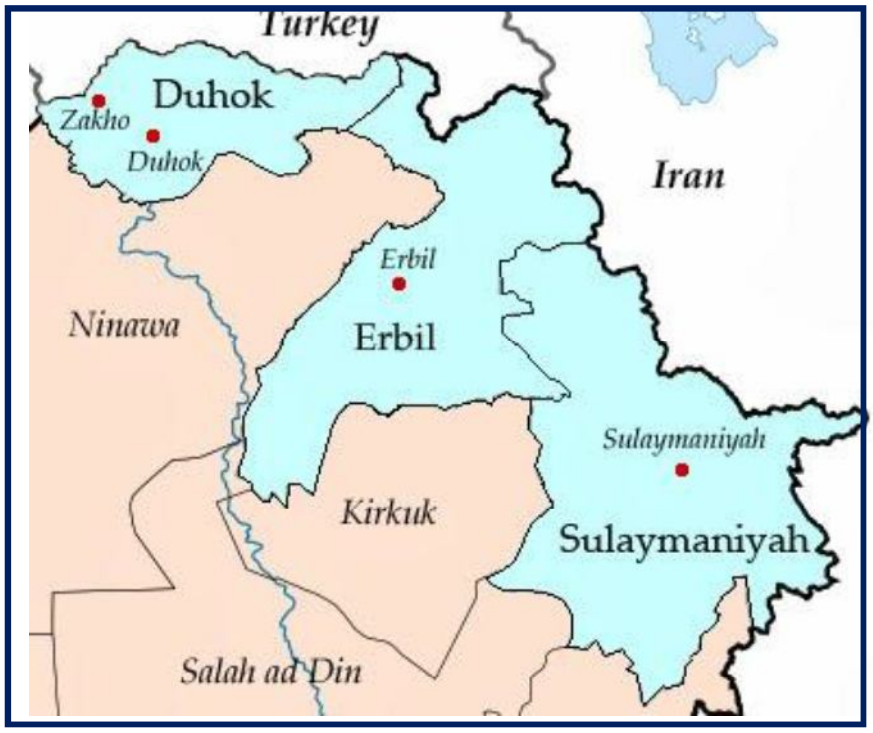


Fig 4.1: Erbil location and its road connections with surrounding cities (URL[12])

4.2 Historical Development

The Citadel Town of Erbil, or Qala't Erbil, is an impressive elevated settlement that has been inhabited continuously for millennia. Although it's exact origins cannot be traced with certainty, there are strong archaeological indications and finds, however, to indicate that it goes back to some 6000 years. According to the data from International Council on Monuments and Sites (ICOMOS), 7000 years of inhabitation existed in this unique urban settlement, making it the longest inhabited place on earth. According to well-known records and archaeological reports, layers of Assyrian, Akkadian, Babylonian, Persian, Greek and pre-Arabic settlements have been found and identified in the citadel (Pavelka, Svatušková et al. 2007).

Sumerians are the first people that appeared in Erbil when the Kings of Ur attacked the city twice (2094 BC & 2046 BC) and failed some 3000 years ago. There are no historical findings or documentation about Erbil from 2000 BC to 1000 BC. Some archaeologists believe that the site has been settled in since the Neolithic to Mid Bronze Age period (6000-1500 BC). From 680 BC to 612 BC, Erbil was a centre for culture and religion; during this period Ishtar (the goddess of love and war) and Great Assur (national God of Assyria) were being worshiped in the city. Assyrians referred to the city as " Arebaello", meaning the four gods. The Seleucid, Parathian, and Sassanid dynasties also ruled the city between 321 BC and 636 AD (Bornberg, Tayfor et al. 2006). (See Figures 4.2 for archaeological remains in citadel)

Fig 4.2: Archaeological remains in Erbil citadel the vaulted chamber (left) and Bathtub coffin right (URL[13])

Fig 4.3: Archaeological remains in Erbil citadel ceramic vessels recovered from the tomb (URL[14])

In 331B.C. Erbil, King Alexander the Great and Achaemeind III. Between Darius, the city witnessed a historical battle under the control of the Greco Empire (ErbilGovernorate 2013).From 640 AD to 1200 AD, Erbil was part of the Arabian Islamic Region of Caliphate. In 800 AD, Erbil was a well-known centre of economic activities. However, by the 13th century, it lost its golden age when the city became a battlefield for Mongol, Persian, and Turkish conquest. In the 19th century, Erbil's population ranged between 3000 and 6000 inhabitants, who mostly lived in the citadel (Bornberg, Tayfor et al. 2006).

It was occupied by Sassanian 640 BC, Roma, Persian, Chiristianity by Constantine. After than Black Sheep Dynasty (1411-1470), White Sheep Dynasty (1470-1508). 1534 Ottoman Sultan Suleiman and finally seized by Sultan Murad IV Ottoman Empire in1638 (URL[15]).

Fig 4.4: Erbil city have strategic location between the great Assyrian cities to the west and south, and the Zagros Mountains to the east, placed it at the heart of the ancient Near East's most important cities and empires (URL[16]) .

It may be safely assumed that the urban form and structure of Erbil citadel did not change to any significant extent since the 18th Century.The present name of "Erbil" is derived from the Assyrian word "Arba-Illu" meaning "Four Gods". Other derivative names include: Arbailu, Arabales, Arbira, and Urbi-Lum as was mentioned by the Sumerian King, Shulki of the Third Dynasty (2000 BC) (URL[15]).

Fig 4.5: City expansion below Citadel (URL [15])

From 1979 to 2003, the City of Erbil was ruled by Saddam regime. During this period, Kurdish people were the most despised community and they lived in fear; thus, many people left the country and moved to the outsite country. Among those who stayed, a majority fled to the mountains and lived in poverty (Bornberg, Tayfor et al. 2006).

To achieve this goal it is important that the Regional Government be balanced to grow and regenerate urban regeneration and make new people an attractive and livable place for residents and foreigners (Bornberg, Tayfor et al. 2006).

4.3 Erbil Citadel in the City Significance

In this part of the study, detailed information will be given about the Erbil old town and the general features and significance of the Erbil Citadel region.

4.3.1 Urban Heritage in the Old City of Erbil

The citadel town of Erbil lies in the middle of the Greater City of Erbil. Although it is now completely engulfed by the huge expanse of the modern city it still lies at the heart of the busy central commercial district. The overall form of the citadel town is elliptical. The citadel of Erbil is a tell or occupied mound, it rises some 30 meters above the ground level of the lower city. Its long diameter is about 430 meters and its short diameter is about 340 meters. Its overall area is [102,000squaremeters] (see Figure 4.5).

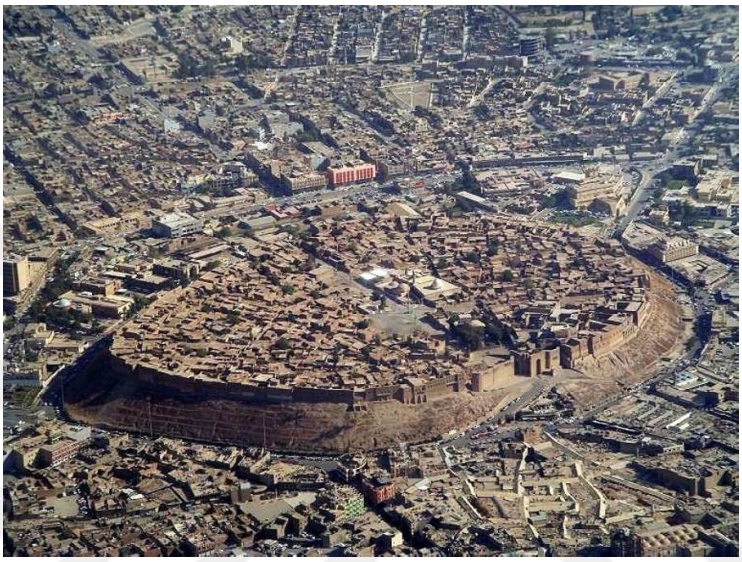


Fig 4.6: Erbil Citadel (URL [16])

The old Erbil historic castle and surround area conservation and development project is supported by the World Monument Fund (WMF) in New York as one of the hundred endangered cultural sites in the world; efforts are being made to list it as a UNESCO World Heritage Site by (HCECR 2009). To support of the local government is aimed to conserve the original shape of the general structure in the project and to transfer future generations (Nováček 2008).

So, The High Commission for Erbil Citadel Revitalization (HCECR) was established by the local government for the historic importance and sustainability of the citadel. The main purpose of this commission is to revitalize and regenerate cultural activities through the creation of a new community that would link the lower city with the citadel. The new community would reuse the citadel buildings to accommodate contemporary functions, including cafés, hotels, and museums (Yaqoobi, Michelmore et al. 2012).

The oldest surviving structure is the citadel's Hammam (bath), which dates back to 1775 while the majority of the houses go back to the early 19th century. This suggests

that houses/structures were layered over and over on top of the existing foundations. In other words, the fabric of the citadel has been regenerating itself continuously (HCECR 2009).

Fig 4.7: The Hammam Erbil Citadel (URL [17 & 18])

The castle has hosted many civilizations. For this reason, the castle has constantly renewed the existing texture. The reason for the renovation of the building is the bricks and clay used for the construction and it is destroyed in the occupations in the town and the new building is built on these ruins.

The citadel preserved its original structure after the ottoman period. After the Ottoman period, the castle is divided in three districts or mahallas: the Serai from east to west was occupied by notable families ,the Takya district was named after the homes of dervishes, which are called takyas) and the Topkhana district housed craftsmen and farmers (Al-Haidari 1985).

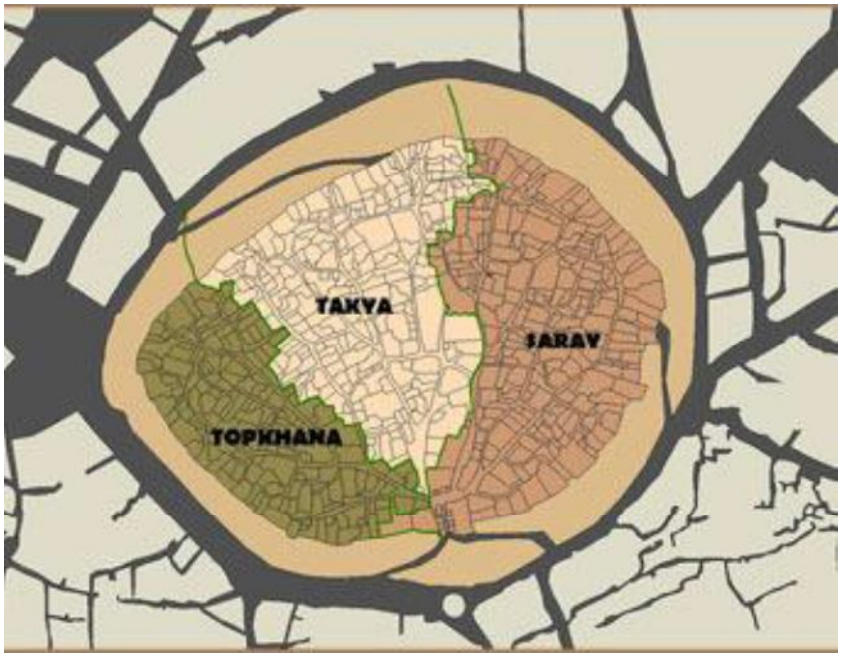


Fig 4.8: Erbil Citadel District (URL[19])

As the city of Erbil began to grow in the 12th century was remained a living city for castle residents. Due to its location in the city center and its close proximity to commercial activities, it has been experienced by many poor families and employees in the city center. The upper town and lower had a very organic and functional relationship, a strong and mutual connection. The height of the buildings was taken into consideration in the new constructions around the city's iconic symbol citadel and the organic compatibility with the castle was maintained in the lower city. The access to the pit was only provided by the ramp on the south side. The ramp led to a big arched gateway, which opened to a small outdoor square. The square branched into four main alleyways. Modern vehicular roads started to be cut through the lower town but the citadel town remained totally pedestrian until the 1958s. The construction of the central road led to destruction of many houses. (See Figure 4.6 & 4.7)

Fig 4.9: Erbil before the opening of the central road, ante 1950 (Frankfort,1950)

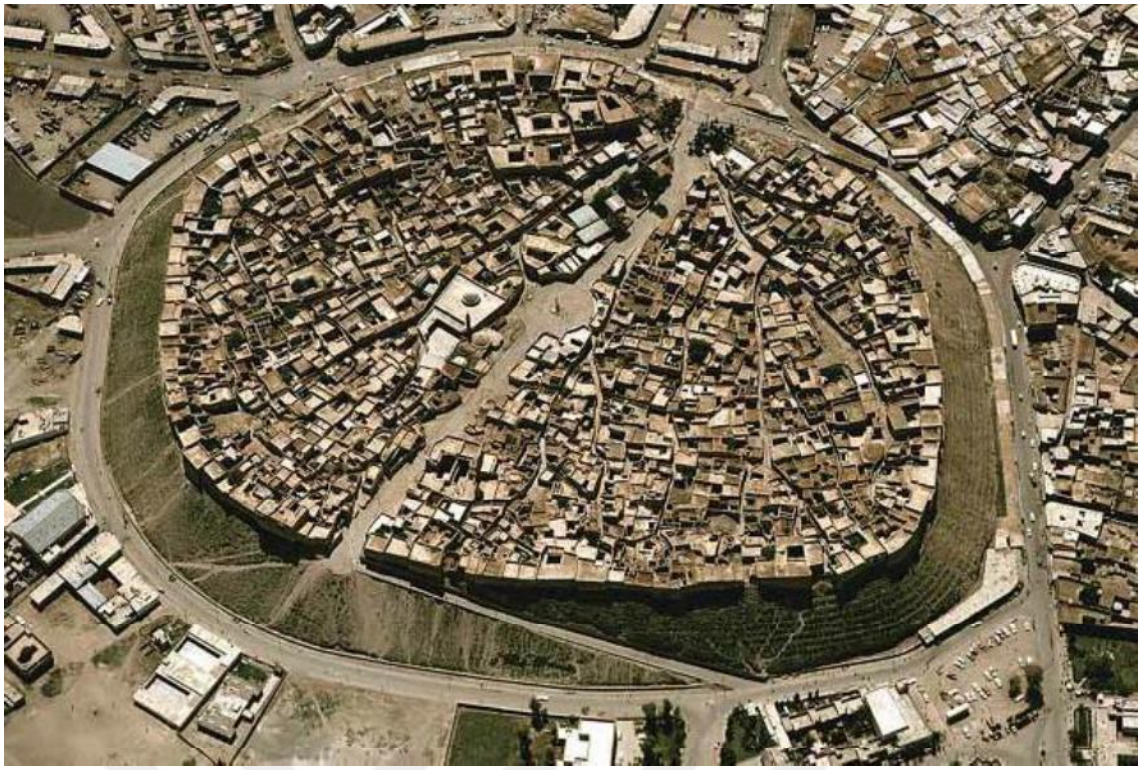


Fig 4.10: Erbil present (URL[20])

Another element unchanged in the citadel is arched gateway and constructed in the Ottoman period in 1841. Grand Gate was the only entrance to the citadel. The gate was closed at night for safety. The Great Gate has an iconic and symbolic position among the locals; for this reason, the original situation is preserved in the protection work since it reflects the original structure of the gateway.

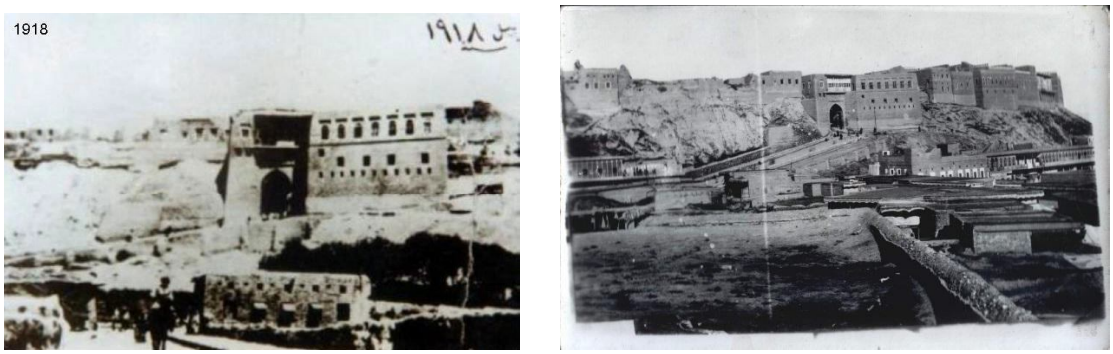


Fig 4.11: Erbil main gateway in 1918 and 1950 (URL[21])

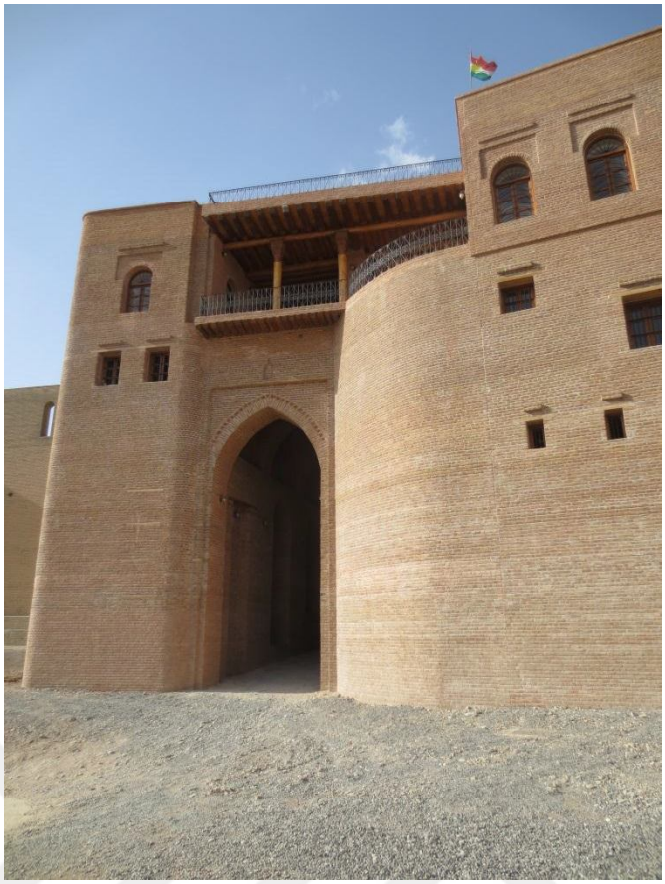


Fig 4.12: Erbil main gateway 2014 (URL[22])

The aim of the preservation and improvement of the citadel and its surroundings is to help revitalize and modernize Erbil while reflecting the culture and history of its people. With the conservation works done, the castle is to make the traditional residential centers cultural center of modern Arbil, where culture, rest and tourism will function in a way to cover. It is known that there are 1.307 archeological sites in the region apart from Erbil Castle and it offers an excellent opportunity to attract tourists to the region (Aki 2012).

Erbil's urban planning was done by the Jordanian engineering consultancy Dar-al-Handasah. Circular roads were built around the castle and the surrounding area. The citadel is the inner circle and the rest represents the radial growth of the city. The urban form development of Erbil City was finally concentric radial layout (HCECR 2009).

A scaled map of the city of Erbil, published by the British Naval Intelligence in 1944, shows the citadel more or less intact as before. It also shows that the lower town had by then grown substantially to the south and east of the citadel and covering an area of about 30 hectares, excluding the large cemetery that lied to the south-east.

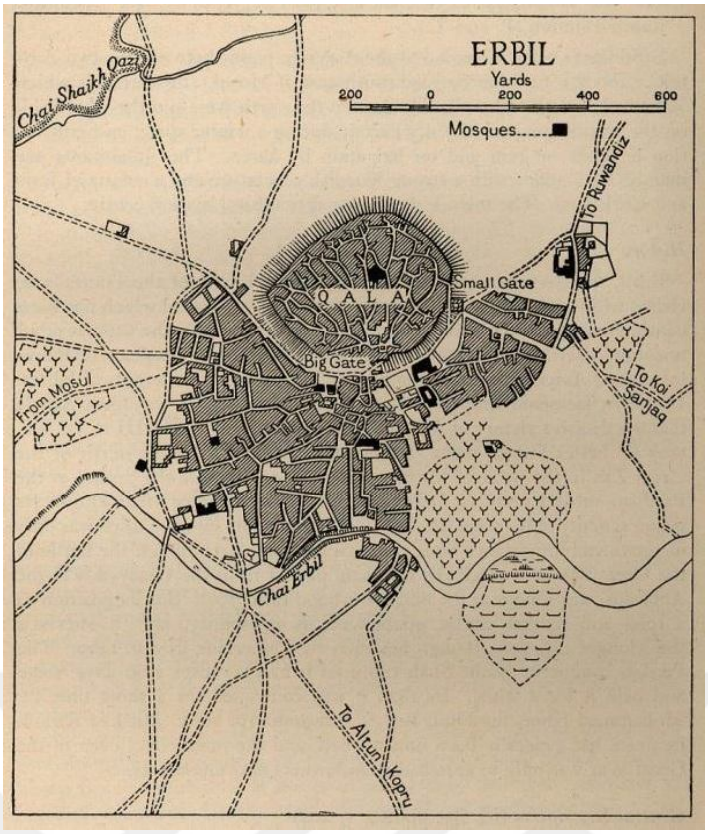


Fig 4.13: From Iraq and the Persian Gulf, Great Britain, Naval Intelligence Division, 1944), (URL[23])

Erbil city has been one of the rare cities in the world that has been established since 7000 years of history since its foundation and because the castle is centrally located, it has a strong defense structure in the city. Citadel the most important urban element that constitutes Erbil city.

Fig 4.14: Bird eye view of Erbil Citadel , (URL[24])

There are three access gates of the castle, which are accessible from the main street of 30 meters.The south-east gate is a main gate and protected the citadel. The following bazaar transportation has been provided by this route and the city of Erbil has begun to develop in this direction. The small East Gate was probably formed in the late Ottoman period, but its dating is uncertain. It can be seen in the earliest photographs and it existed on the earliest extant plans. The North side (Ahmedi) gate was built through half of one of the perimeter houses by the first mayor of Erbil in 1925 (Michelmore 2013).

The city of Arbil follows the pattern of a ring that surrounds the historic fortress (Qala) in the city center. Although the city is expanding rapidly, it has a relatively compact structure compared to other cities of similar size in North America or Europe (Airinc 2012).

In the past the citadel was surrounded by a wall and bridges and had a moat under its hill, similar to the other fortresses initiated on tell sites and distributed across the region, such as, Kirkuk in Iraq and Aleppo in Syria. In more recent centuries another two gates were added, the moat disappeared, and the wall was replaced by a continuous ring of houses (Michelmore 2013).The archaeologists had research citadel the defensive wall with its towers and the moat at the base of the mound; notable are descriptions by C. Neibuhr in 1766 and other historical records from the middle Ages, as well as, local historians who had lived within the city.

The expansion of the modern lower town south part since the 1930s, routes expanded to the plain below and these constituted a commercial area, the bazar in the region nearest to it. Resulted in the gradual demise of the citadel. Most original inhabitants, especially notable families, began to move down to the lower citadel and occupy modern style house. Thus empty citadel houses began to be occupied by poorer families and rural migrants who could afford little maintenance.Three historic district Arab, Tasjeel and Khanaqa, and commertial area of the southern area Qaysari bazaar to below the developing castle. (S.P.A. 2011).

Although Erbil has faced different stages of change and growth at different times, has been protecting the texture. In 2007 UNESCO and the High Commission for Erbil Citadel Revitalization HCECR,have been work on preserve the old citadel and traditional district.

Fig4.15: Neglected houses in Citadel , (URL[25])

Historical citadel and surrounded renovation and conservation work according to importance degree into buffer zones A and B, conforming to UNESCO's rules.

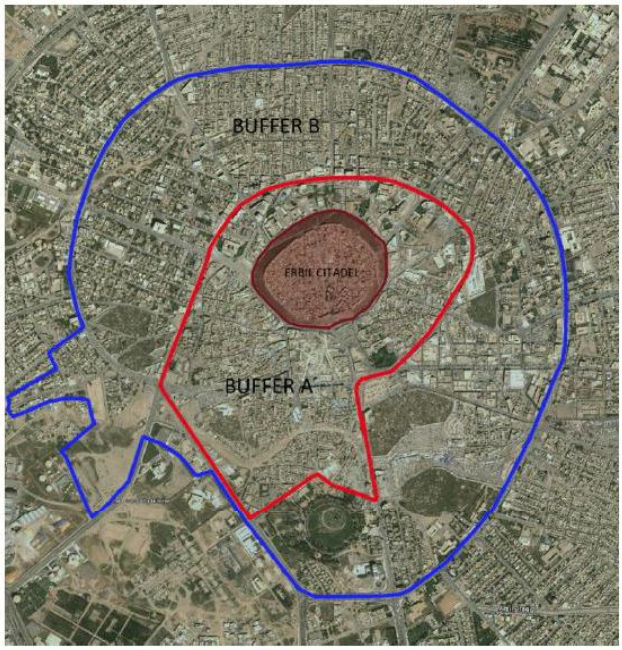


Fig4.16: Buffer zone of Erbil Citadel (S.P.A. 2011)

The city has faced changes and rapid urban growth with modern and globalized architectural designs as well as effected many factors its old urban form and texture. The urban fabric of the citadel has been similar to other traditional cities in Iraq which is characterised by their organic fabric that resulted from different factors, such as social,environmental and religious issues.According to the ministry of planning, 83.4% of citizens live in cities 84.5%. Thus affecting the development and growth of the city (ErbilGovernorate 2012).

Erbil citadel, one of the important cultural heritages of human civilization is a monumental work that stands out with its walls, structure, strength, archaeological inscriptions. Houses,hamam,mosque,takkas,alleys and bazaar with major historical

monuments in old Erbil city. Citadel was located in the oldest settlement center of Erbil. The Erbil Citadel District is a settlement area with certain values in every period of history.These values;

- Having hosted many historical civilizations,
- Protecting the integrity of the city with the perimeter walls of the citadel
- Having a special place in terms of being a regional center,
- Living legacy of urban heritage shows,
- The fact that the cultures in the Mesopotamian regions are influential in urban development and therefore have a mixed urban morphology,
- The distinctive structure of the urban community and space is evident,
- citadel always renews yourself because it has a significant population potential in every period of history

Fig 4.17: Erbil Citadel Satelite View , (URL[26])

Until the 1930s, almost all of the population in Citadel was living in courtyard houses surrounded by city walls, nowadays the total About 90% of the population is partly planned but a significant part of the castle and surrounding areas lives in the regions where we can call it "conurbation".

Urbanization rate in Erbil is considerably higher than the urbanization rate in Iraq. Along with this rapid urbanization process in Erbil, the city center has been lost its historical significance and begun to turn into a depression zone. In generally, Erbil has a typical old alleys,traditional houses,hammam,bazaar in the citadel and surrounded area that forms the historical urban fabric, especially the structures built in the last 40 years and the historical and cultural original doctrine was lost. In terms of today's architectural

structure, the traditional texture in the citadel(Qala) region has transformed into an incompatible urban structure with new construction.

Fig 4.18: New buildings around the Erbil Citadel , (URL[27])

In order to maintain the visual dominance of the citadel, a buffer zone was recommended by the HCECR in collaboration with the Ministry of Municipality and UNESCO. The buffer zone follows the perimeter of the citadel and is approximately 300 to 400 metres wide, which limits the construction of any buildings that is more than 3 floors. The purpose of the new height restriction is to preserve a clear view of the citadel from all streets, maintaining visual vistas, within the buffer zone and emphasizing the iconic view of the citadel in the city centre (HCECR 2009).

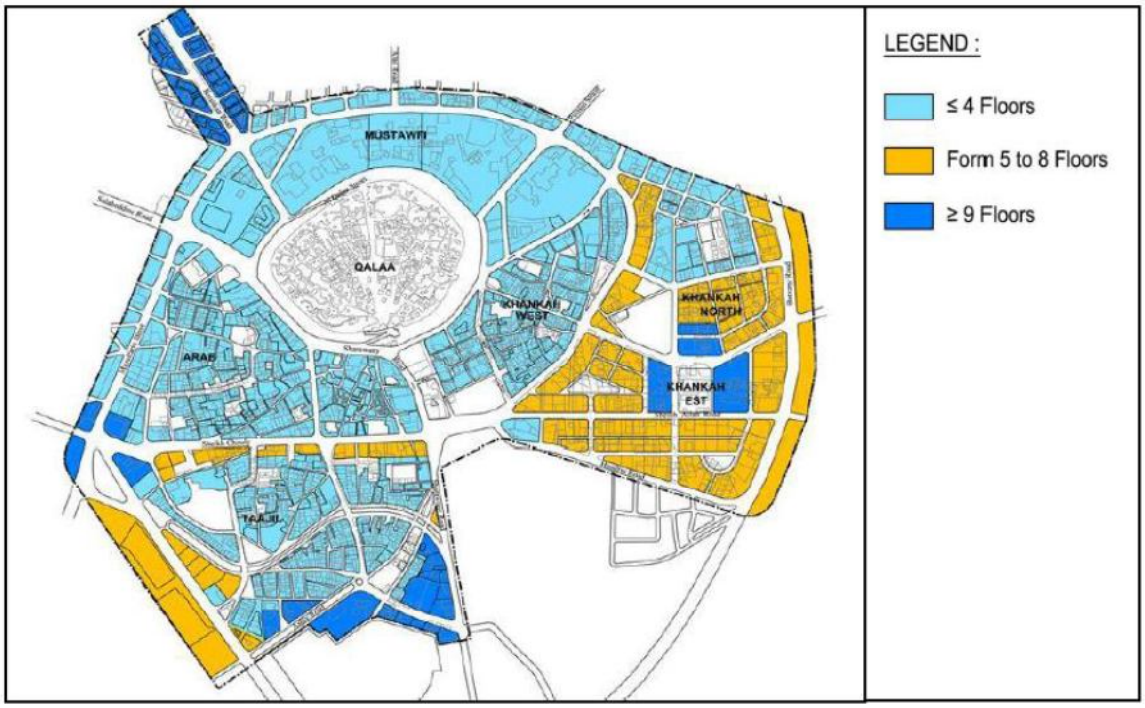


Fig 4.19: Building Heights Development Plan. (Municipalities 2013)

4.3.2. General Characteristics of Erbil Citadel

The Erbil citadel has carrying many traces of civilization, Rich history and cultural accumulation with different civilizations,the place and center of civilization, therefore has a cultural and social heritage that houses many historical values. But over time these areas have been neglected and many of their values have disappeared. While the historic city textures provide the vitality and development of the city, at a level where they can continue to integrate harmoniously with the urban environment, they can be private areas that provide important contributions. The election of the city of Erbil as a settlement area in every period of history has strengthened its historical identity. The items that make up the historical texture of the city are courtyard houses and streets, mosque, bazaar, takyas and hammam.

From these;traditional houses, hammams, takyas, mosque and alleys. The citadel is the first zone of the urban protection area with a total area of 102.000 m2. The neighborhoods and streets in the old city of Erbil, home-street relationship, Contraction and development continuing along the alleys, and the different perspectives that form in the nodes form different urban texture. The alleys became a corridor by elevating the outside walls of houses to protect the lives of the houses. (See Figures 4.15)

Fattah Chalabi House

Mulla Afandi Mosque

Hammam

Takyas

Fig 4.20 : Citadel historical values ,URL[28]

Physical disintegration and deterioration in the Citadel, incompatibility of the new modern constructions made in the area with the surroundings, has caused the destruction of traditional houses and historical values. Nowadays, citadel and surrounded area is more than a historical city is a depressed area that drives commercial significance and vitality. Thus facing the physical, social and economic problems observed in the historic city centers. Whereas, while the historic city textures provide the vitality and development of the city, at a level where they can continue to integrate harmoniously with the urban environment, they can be private areas that provide important contributions.

Fig 4.21 : The state of the Erbil Citadel surroundings after the renovation,(URL[29])

Fig 4.22: Vehicle density around Erbil Citadel after transformation, (URL[30])

4.4. Planning Process and Historical Development of Citadel Surroundings

The lower city of Erbil started to grow in the 12th century while the citadel remained as a living town for its inhabitants. The development of the surroundings of the citadel seems to have been to occur during the Ottoman period in 1900. The fact that buildings that did not respond to the conditions of the day when they settled outside of the citadel settlement in these years was intended to construct more modern buildings.With the increasing population density in the city, the developments in the restructured urban settlements outside the fortress have developed in the direction of the southeast. In previous reconstruction situations,instead of one-two-storey house with the touch of a

place made in this district, today the houses have been left without maintenance and have been applied in the modern style. (See Figures 4.17)

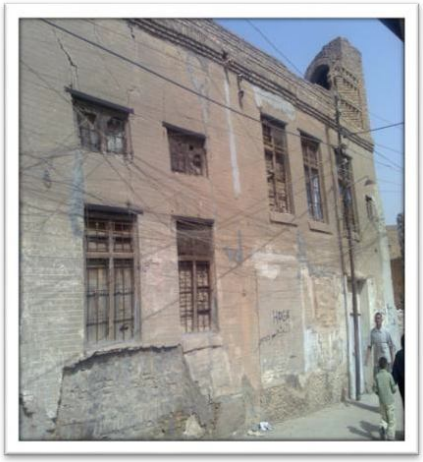


Fig 4.23: Modern constructions in the new residential areas surrounded of citadel,(URL[31])

In 1984, the Directorate General of Physical Planning in Baghdad prepared the first master plan for Erbil. However, due to the rapid growth of the city and the lack of vision and inadequate urban planning policies and frameworks in that 1984 master plan, a new master plan was created in 2005. Since the master plan made in 1984 old master plan did not respond to the current condition and needs of the city and the lack of vision and inadequate urban planning policies, a new master plan was created in 2005. As a result, the local government and Dar Al-Handasah, in collaboration with an architectural and engineering consultancy firm, have prepared a new master plan for the city of Erbil. The master plan made in 2005 is divided into two parts. The first part is referred to in the plan as the Buffer Zone Area and consists of three section. This is near to citadel, height of building, material and color.

The first part of the plan has been finished 5 years, and The city is currently working on the second phase. The urban transformation project on the citadel and the surrounding area includes outdoor theaters, restaurants, cafes, artisans, and underground parking. The main purpose of the project is to make the citadel stand out in the center and also to be visible from all directions. The skyline of the city will be preserved. The project aims to develop the architectural heritage of the citadel by combining cultural activities with entertainment and relaxation. The creation of an urban transformation within the city center and its surroundings has helped the citadel to stand out. Thus, the citadel can be viewed as an iconic feature in the center of the city as it has always been before. However,

the conceptual design should take into consideration the urban fabric of the citadel's surroundings and the archaeological and historical significance of the citadel.

When the identity of the city is thought to be a dynamic and constantly evolving structure, in every period of history, the work that emerged under the name of city title, There is an effect on the physical construction of that city. Therefore the whole value of the city's evolutionary process detection is the process .Therefore the city has all the values that a process of evolution has in fact a perception process (Nalkaya 2006).

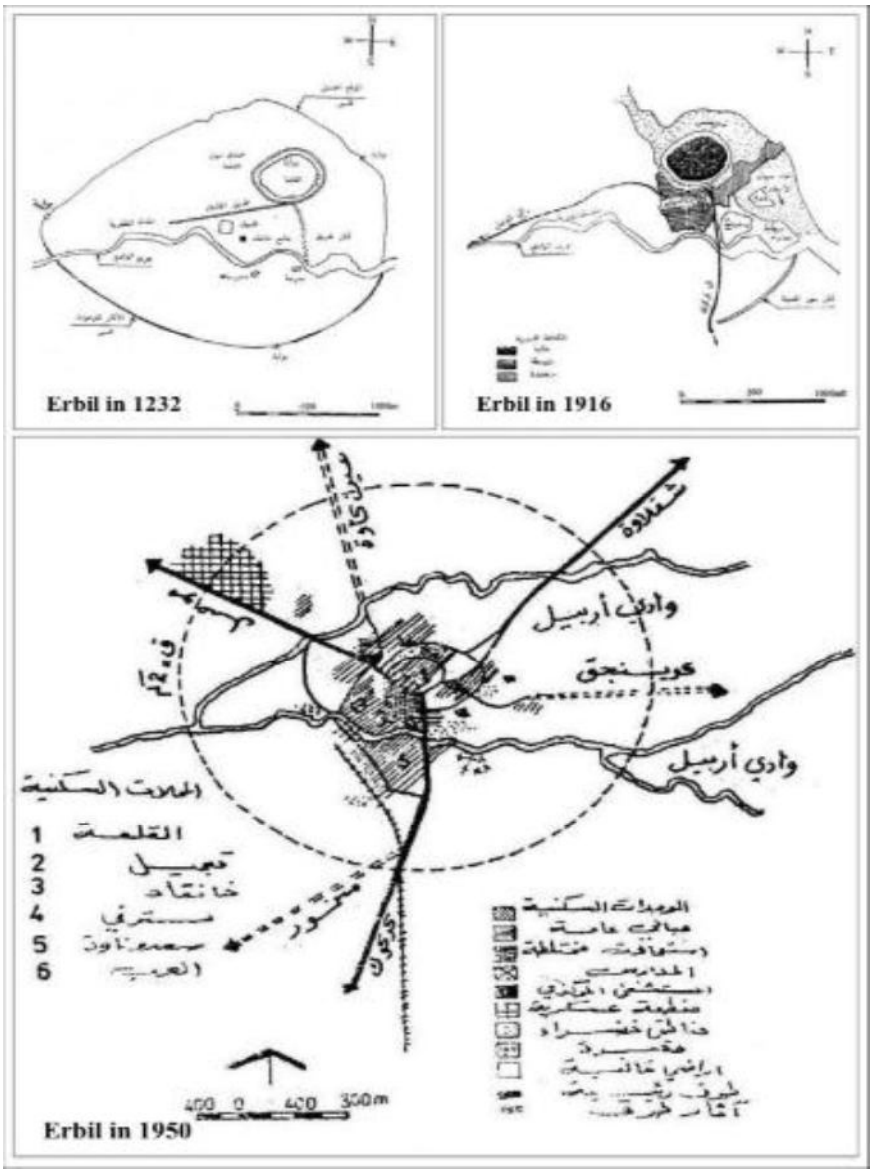


Fig 4.24: The development of Erbil citadel surroundings in three different time periods (1232,1916,1950), (Ministry of Municipalities General Directorate of Planning and Engineering 2016)

4.5. Implementation of Zoning Plan for The Urban Protected Area

The definition of the urban protected area is to provide physical integrity in terms of architecture and art history and the environment in which these features are formed and the integrity of the texture in the areas that reflect the socio-economic, socio-cultural structure.

Some of the problems seen in urban protected areas can be categorized as:

- Registration problem,
- Use of historical areas for different functional purposes,
- Malfunctions in the implementation of conservation plans,
- Lack of education for people living in the urban heritage site.

The citadel and surrounding area seems to have been preserved in general; but when we look at a single building scale, the result is exactly the opposite. The basic reason for this, about the historical environmental protection the required responsibility was not fulfilled and the public does not have enough knowledge about protection.The rapid and unplanned development of cities has an important place in the construction of conservation work. Observations made at citadel and sorrounding area show the following results;

- Incompatibility with traditional texture,
- Transportation and parking problems, which are the consequence of growing population and increasing population,
- The negative social transformation and social depression region formation that comes with the abandonment of traditional buildings by property owners,
- With the rapid population growth, unplanned growth, adversely affecting the housing texture of the city,
- The rapid growth of the city and population growth are affecting the historic and traditional urban fabric of the city center,

  The conservation work of the historical citadel and surrounding areas started to be carried out by UNESCO in 2007. So, Urban in the management of cultural heritage envisaged for citadel and surrounded improvement and economic revival. The objectives of the conservation work UNESCO done in the historic city of Erbil are;
- The measures to be taken for the protection of historic buildings in the region will be sustainable.

- The social and economic structures of the people living and working in the protected area will be improved.
- The protection plan will include decisions create employment.
- Rehabilitation and transformation projects will be included in the protection.
- Not only protection, but transportation, open space system, pedestrian navigation, infrastructure will also address the principles.

In the conservation work carried out in 2004, there are 120 houses with medium size houses and 350 houses with low income families, and 30 palace houses inhabited by rich families. Mosque, hammam and takyas were also included in the protection and registered. In accordance with the decisions taken, firstly the citadel protection studies and related determinations were made on the boundaries. In the second phase, the boundaries of the areas outside the citadel were determined.

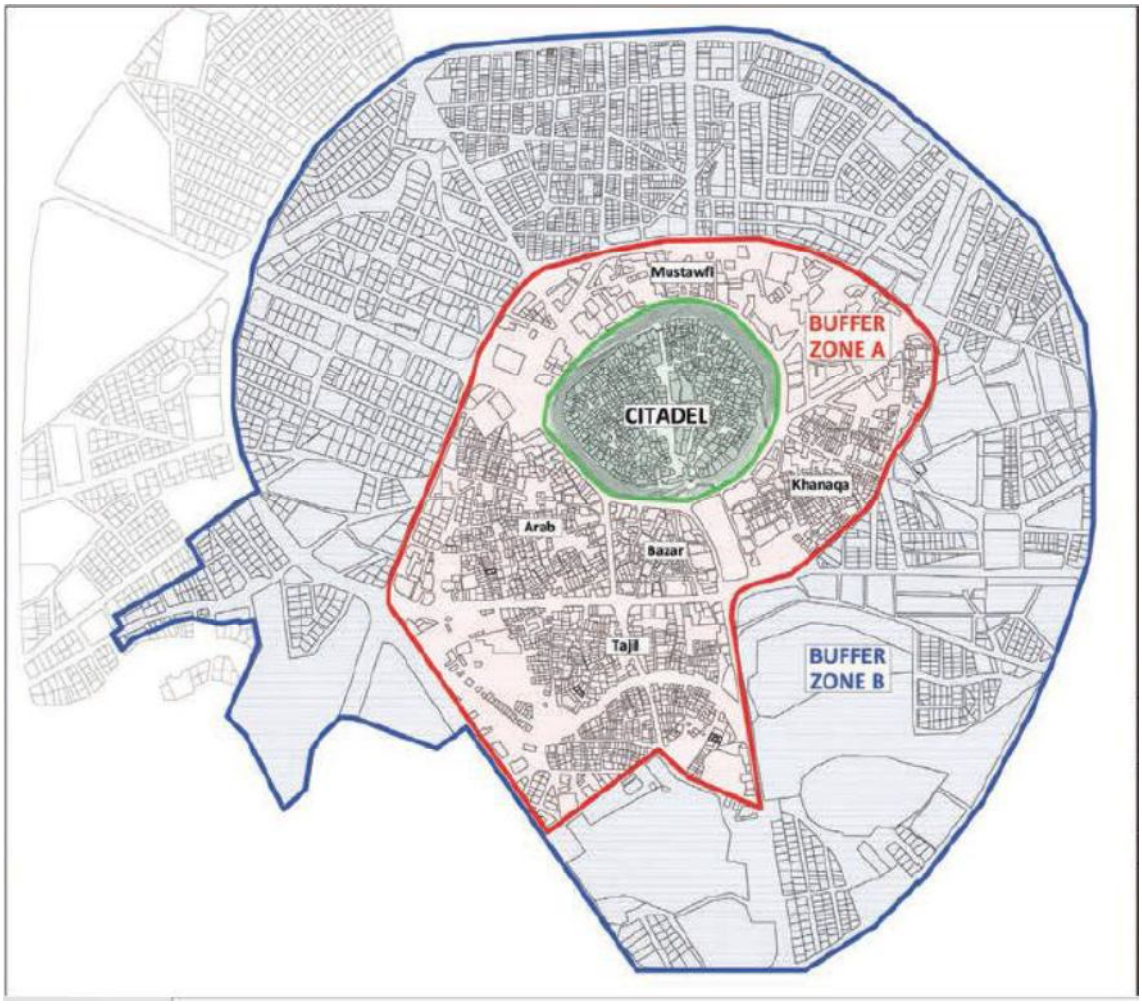


Fig 4.25: Boundaries of buffer zones A and B , (The Ministry of Municipality 2012)

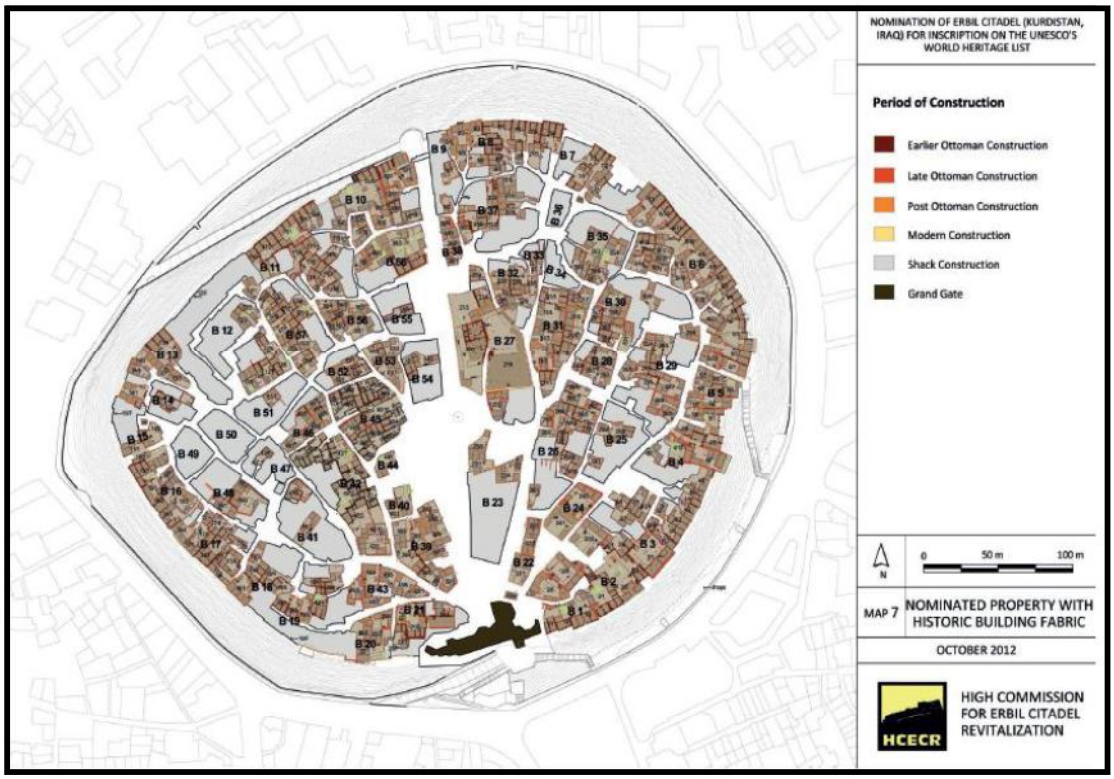


Fig 4.26: Registered buildings in Citadel, (Nomination of Erbil Citadel 2012)

For the Erbil citadel and surrounding urban protected area, in the decisions given in the Conservation Development Plan;

- The fact is a plan approach which is sufficient with physical arrangement,
- The preservation of historical texture and the inhibition of modern structure targeted but not implemented,
- Increase of public and green areas,
- Creating sufficient parking spaces to reduce traffic intensity,
- With the development of tourism in the present area, both economic and cultural development are targeted,
- The height of the new structures made in the traditional area is compatible with the city skyline,
- With the zoning plan study for conservation, the region has the cultural the preservation of values and the transfer to future generations,
- The cultural values that the city possesses are recognized as a heritage and the sustainability of protection,

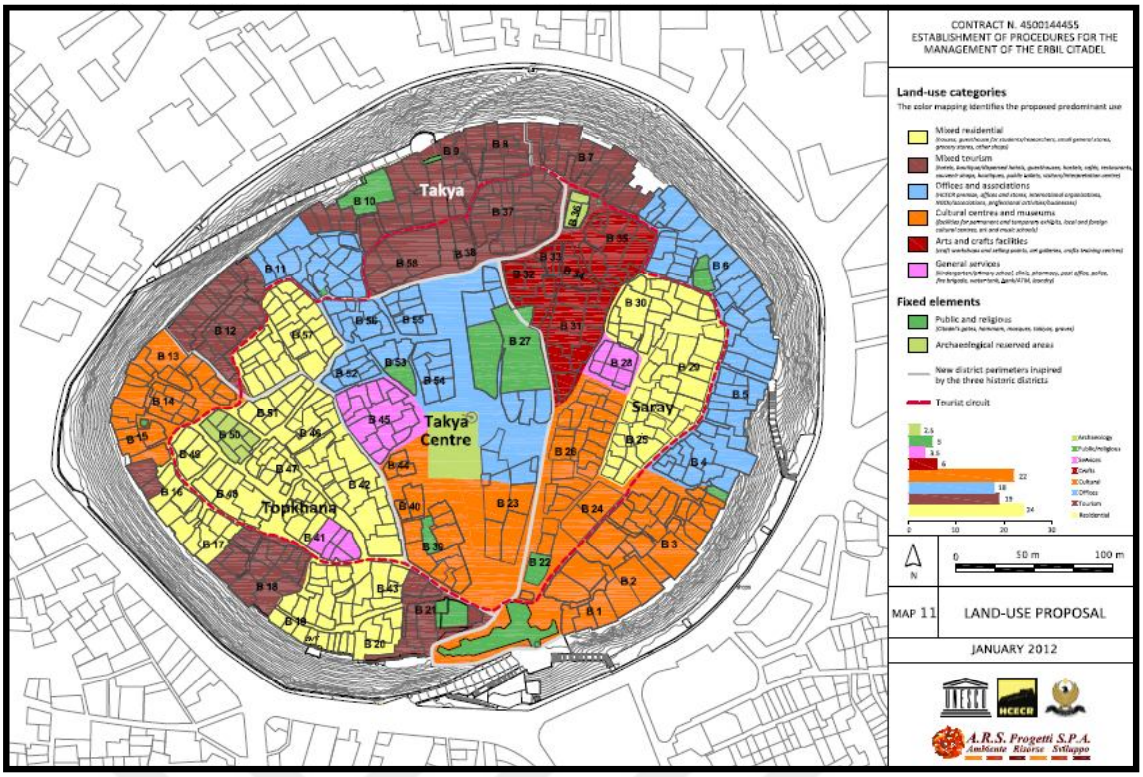


Fig 4.27: Erbil Citadel planning work, (Nomination of Erbil Citadel 2012)

The existing plan for the Urban Conservation Area, which includes the settlement of Arbil's traditional fortress and surroundings, and the cultural assets that exist in this area are to be preserved in accordance with the principle of sustainability and to be transferred to future generations in order to allow for the development of plan decisions.

As a result, the planning and studying of the castle and surroundings will enable the field to bring together the principles related to the spatial, social, economic and cultural dimensions.

Objectives for the social are:

- Developing decisions that enable people to have a user profile peaceful with the live environment and has a conscious awareness of protection life with opportunities to be created simplification of conditions, the studies carried out mainly social goals.

Objectives for the Economic are:

- The creation of economic vitality, which will allow the conservation to reach success and in this sense, providing activities that will a lot of of time to visit the region is the economic goals of the work done.

- The cultural values of the city are the most important element of the economic development of the region and assist in the development of tourism.

Objectives for the space are:

- The transfer of protected structures to future generations,
- The new structures built around the castle and its surroundings are in harmony with the traditional texture,
- Providing the general rehabilitation of the area, ensuring that the structures are qualified and safe,
- In addition to constructions, the protection of other elements such as courtyard walls, street floors of traditional texture.

The goals of the castle and its transformation project are inadequate in terms of planning when considering the region's ever-changing socio-cultural environment. Restoration and rehabilitation of old structures in the citadel and surrounding with necessary intervention methods can become a part of the city living in the area. In particular, the historical architectural heritage value in the area have a separate importance in this sense.

4.6 General Assessments of the Erbil Old Town

Erbil Citadel and surrounded area is examined and the following conclusions are reached;

- Destruction of traditional structures,
- Corruption and improper maintenance of attachments to original attributes,
- Due to the low income people living in the region,the continuous change of the socio-economic cycle is effective in the destruction of the urban texture,
- The practices in the name of modernization has led to the destruction of urban fabric,
- Local governments cannot control the new construction in the region,
- The rapidly increasing population and changing socio-cultural environment due to the fact that the castle and its surroundings are at the center,
- Political reasons prevented the development of the area,
- The inadequacy of the local government's planning techniques and limited legislation.

4.7. Case Of Study:Urban transformation Erbil Citadel and Surrounded Area

In this part of the study, information about the spatial and socio-economic impacts of Urban Transformation Project will be given in the historical data of Erbil historical castle and its surroundings obtained from the related questionnaire.

4.7.1 Current Situation of Planning Area

In the studies made in the planning area, some of the information for about the population and structure status has been reached.

`Name of district	Population	Number of Family	Number of Residence	Number of workplaces	Public Area
Citadel	40	8	575	176	
Arab District	2658	570	551	745	10
Taajeel District	3800	791	816	930	8
Khanaqa District	5417	1078	5741	4107	21

Table 4.2: Population and number of buildings in the conservation area of old town Erbil

83% of the existing buildings in the city are for residential purposes and 12% for commercial purposes seems to be used. It is understood that 95% of the buildings in the city are in residential and commercial use if the use of non-residential buildings, which are defined as the mixture of residential and non-residential buildings, is generally considered to be trade use. In the Arab,Taajeel and Khanaqa, there are mostly small-scale business and commercial facilities as a residential area.

Among the neighborhoods that constitute the historical city of Arbil, the neighborhoods with the highest number of residences, the Arabs, the Tajeel with the least residence are the Khanaqa neighborhoods. Sultan Muzaffer, Bata and Shex Choli streets are the places where the most important commercial activities are realized with different quality of establishments, shops and businesses.

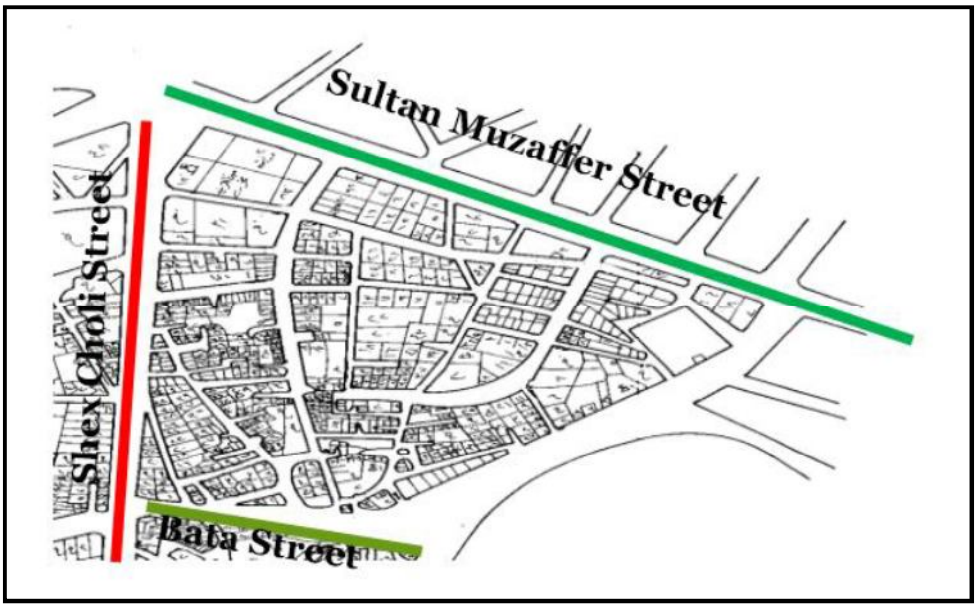


Fig.4.28: Main streets surrounded on the site (Ministry of Municipalities General Directorate of Planning and Engineering 2016)

In the citadel some existing houses have dates inscribed on them AD1893. Another house had a dated inscription AD 1903. It is almost certain that there are older houses particularly on the south eastern side of the citadel. Houses were built over and over again and again on top of existing foundations, semi basements or even some walls. In other words, the citadel's fabric has been regenerating itself continuously. Overall, the citadel consists of 500 houses; the majority of houses are built following a traditional courtyard prototype. Of these, there are 30 or more houses that are larger in scale and have a palace-like appearance; they are mostly located at the peripheral wall of the citadel, where the wealthy people settled. The existing fabric today consists of about 250 buildings most of which are courtyard houses from early 19th century. It may be safely assumed that the urban foand structure of Erbil citadel did not change to any significant extent since the 18th Century. Today, there are some 90 or so houses which have original and authentic architectural qualities that merit their restoration to their original state URL[32].

In the Erbil Region protected area, not only registered buildings, but also urbanthe protection of the city as a whole is the priority. Rehabilitation studies have been carried out in areas where the original touch has deteriorated and the area is re-authenticated must be provided.

Erbil citadel was constructed with narrow alleys that cut through each other. This organic plan is a remnant of a plan that is reflected daily from the time of the ottoman. In

the historical Erbil Protected Site, the structures of urban fabric, historical and cultural heritage must be prevented from destroying areas of the city's historical heritage.

4.7.2. Spatial and Social Status of Transformation Area

We can explain the spatial and social situation of the planning area in the site of survey studies. Historical Erbil Region Urban Transformation Project and Conservation Development Plan are included in the study area;

- Residents of the residential area,
- Workplace representatives
- Surveys have been conducted with out-of-area users.

In this section, the structure and characteristics of the population in the transformation area Erbil old town is studied. Social data sources related to the transformation area were obtained from inland observations, in-depth interviews with residents , residential and user surveys made in the area.

4.7.3 Survey Results

This part of the study will give information about the data obtained as a result of the area survey.

4.7.3.1 Population and Household İnformation of Erbil Old Town

When examining the age pyramid that lives within urban boundaries;

- Appears that the area is crowded with middle and old population,
- 0-19 the age group 35% of the total population,
- 30-55 age group seems to constitute 48% of the total population.

Participated in the survey conducted in the urban protected site of the representatives 65%are men and 35% are females. Medium-sized houses numbered about 120, while smaller houses of poorer families numbered about 350.There were some 30 large palace-like houses that were mostly located on the peripheral wall but some were inside the town proper. It is seen that families are mostly formed 5-9 person. the total dependency rate of the population living in the protected area is high.

4.7.3.2 Ownership Status of Erbil Old Town

With the development of the city, the owners of the house have moved to the modern houses, which are inferior due to the lack of their daily needs, and the poor families live in vacant houses. All traditional houses in old town Erbil, large and small had open courtyards and were constructed in brickwork. The majority of the houses in the central district have been degraded, and the same understanding has remained in deteriorated texture. Houses were built over and over again and again on top of existing foundations, semi basements or even some walls.

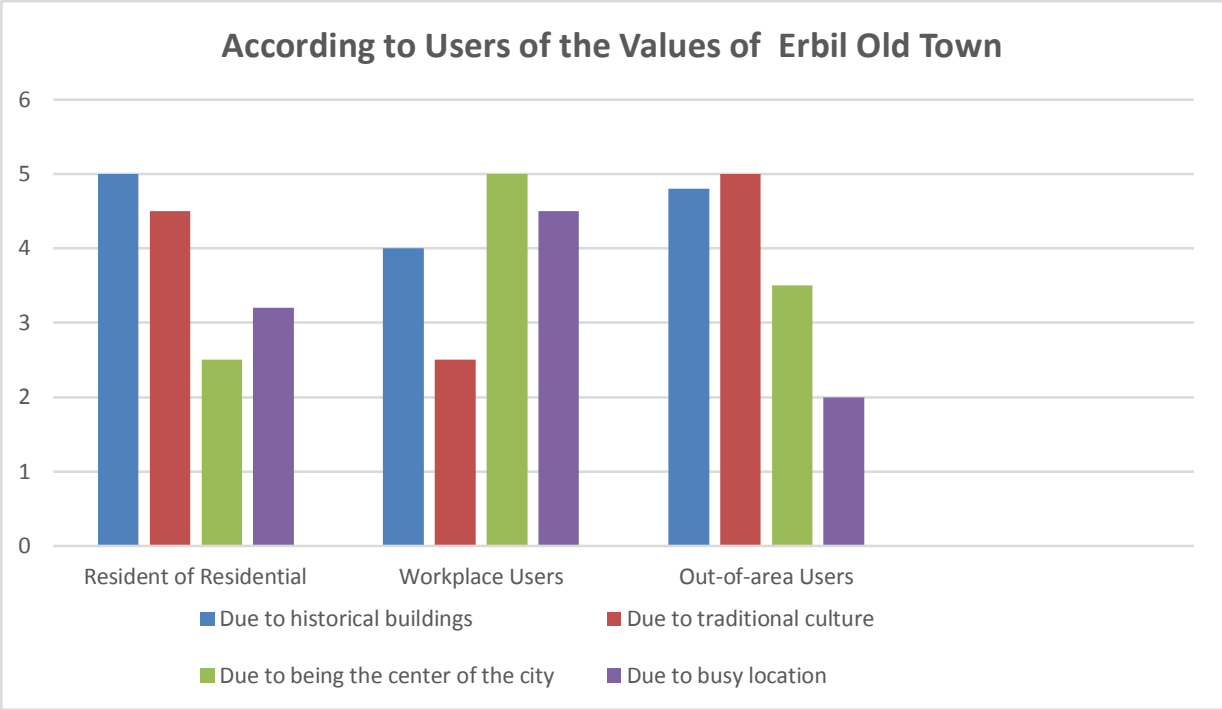
4.7.3.3. Immigration status of old town Erbil and reasons why living people prefer Citadel

Migration from the beginning began in 1940 and the old city was occupied by poor families as well as another impact on population growth in the city. Due to the size of population to meet the urban needs and the inadequacy of the development areas of quality in the face of the population increase rate, the density increased and the areas of the facilities and the urban service were inadequate. As a result, it creates high density and low quality areas. local people have chosen this area because they are in the center because the reasons for living here are in places where they are born and raised and because living households are close to their workplaces. But due to conservation work carried out in the urban protected site, the houses were evacuated and the land was given as compensation to the household. The people live in difficulty with not adapting to their new life, at the beginning of which is the distance from the center, the lack of alignment with the new circle can be listed.

4.7.3.4. According to users of the Erbil old town, which approach is worthy of the area

In the planning area, which dates back hundreds of years, the foundations of many civilizations contributed to the idea of preserving Erbil historical area. However, there are some other factors that may be worthy of Erbil old town in terms of residents living in the area. It is important to learn how local residents value the area, as well as to the evaluation of experts. The reason being valued by users Erbil historic area of "historic structures" and "people's traditional culture," "people's traditional culture", "to be at the center of the city" as can be listed. The responses of business representatives have been different. According to them, "to be in the center of the city", "because of people's traditional culture" and "to be a place to be active" is

preferred. As a result, it is an important factor for residents and business users to be in the center of the city. While "people's traditional culture" is an important factor for residents and visitors from outside the area, this factor is a less important factor for workplace ownership. At the same time the "having a busy place" factor was considered important by workplace ownership representatives but not by others.



Graph 4.1: From which angles the space users find the Erbil old town valuable

4.7.3.5. Whether or not is Useful to Protect the Area According to Erbil Old Town Users

The subjects studied for preservation of structures in the historic city of Erbil are generally whether preservation and preservation of historical structures are beneficial. According to the answers about the Erbil old town protection of there are no significant differences. The "beneficiaries" of the protection of the Erbil old town are more important for the workplace and out-of-area users than residents of residential and there are more people in the old town who find it useful to preserve only historic buildings. According to the residence type, there are no significant differences between the responses, but the general idea is that conservation is only at the building level. Generally that is more important to protect the historical buildings in the area in the survey. The reason of the fact that the historical buildings in the area are not protected and the history is destroyed

due to improper protection. As well as the protection and renovation works carried out, the area is revitalized and the works are seen to increase.

4.7.3.6. What was needed most in Erbil old town

What the Planning Area users need most is the protect area is important in terms of continuity. In the fieldwork studies the list of needs expressed according to the three groups is as follows:

a. For residents: The most needed items in the conservation area are well-kept streets, health facilities, infrastructure, parks and green areas, educational facilities, children's playgrounds.
b. Workplace representatives: The most needed items are well-maintained streets, parking lots, regular pavements, cultural facilities, historic restoration, parks and children's playground.
c. Out-of-area users: The most well-maintained streets, regular pavements, cultural facilities, educational facilities, historical restoration, parks,parking lots, children's playgrounds and restaurant-café.

The most common needs of these three user groups are the well-maintained streets and parking areas. When the responses of all three groups of users are considered together, the first eleven items the domain users most need roughly can be ordered:

- Restoration in historical buildings
- Well-kept streets
- Health facilities
- Infrastructure
- Parks and green areas
- Educational facilities
- Children's playgrounds
- Parking lots
- Regular pavements
- Cultural facilities
- Restaurant-café

4.7.4. Urban Transformation Potential for Urban Historic Town in Erbil

Erbil old town is in the status of the first grade Urban protected site and was included in the world heritage list by UNESCO in 2014. Historical castle with historical and

cultural value in the historical city, public building (governorship), houses, mosque, street, bath, tekke, bazaar and civil architecture examples.

Religious buildings and public buildings that are in use are better protected than inns, baths and houses. The existing buildings of the houses in the citadel are from the 19th century and carry traces of historical texture and 250 of them retained their original state. New structures and green spaces around the citadel have come to life with urban transformation. It is desired to maintain the same architecture and texture in the new constructions.Thus avoiding the loss of cultural and historical heritage in new constructions.

Erbil old town is a region where historical and architectural accumulation takes place. Although the historical city of Erbil is a region with historical and traditional touch, central business area and housing functions, it has been a region that has undergone wrong restoration and physical aging, declined from socio-economic aspect and gradually turned into the area of social depression.

In Erbil, the arrival point of migrations from rural areas is usually the historic castle has been. These migratory people of rural origin, with a very low income order, survived here with the relocation of the local people to the lower town. They have not been adequately preserved in these historic buildings and gradually losing their qualities as they can not been repaired. In response to the social, economic and spatial collapse process in the vicinity; Erbil old town protection the existence of registered works, the existence of historical heritage, the necessity of plans and projects for protecting the area.

Before the Erbil old town became an urban protected area, it seemed to be a depressed area that maintained its commercial significance and vitality rather than its historic center character, at the same time, the physical, social and economic problems observed in similar historic city centers. Old Erbil town is the result of inadequate environmental quality and infrastructure services; such as housing, transportation and recreation areas, and the lack of social services for health, education and culture. As a result of these problems, the old town of Erbil has entered into a process of social, economic and spatial collapse.

Fig4.29: Historic buildings in the city of Erbil before restoration examples of neglected buildings URL[33]

In the Erbil old town, the maintenance of the central business field functions, the ongoing urban transformation project creates significant potentials and opportunities for transformation into the area. In this context, transformation interventions in the old town Erbil will help develop the area. These are;

- Possibility to take part in a holistic planning framework
- Conservation, vitalization, functioning and reuse approach
- Transformation is a process and team work, based on participant and cooperation of realization
- The old town of Erbil, preservation, revitalization, functioning, culture, center, maintenance of tourism functions and their focus on these uses

Due to incompatibility with the historical environment in the historical Erbil old town Urban protected Site, primarily is necessary to provide arrangements. Most of the historical buildings have been destroyed to a great extent and the construction of these structures must be made in a manner compatible with the original style. Functioning and restoration process together to speed up the protection of the situation will contribute to Erbil's unique healthful construction. In addition, new structures in 3-5 floors built in uncontrollably modern buildings in old town cause damage to the city texture. At the same time the city is influencing the skyline.

The historical city of Erbil, now the urban transformation, the work of the castle and its surroundings is proceeding under the leadership of UNESCO with the "Historic Erbil Castle and its Surrounding Conservation and Urban Renewal Project". The Erbil Citadel and surrounded area constitutes the essential elements of the unplanned construction of the modern buildings and the transformation of the structures of the historical value left

without maintenance. If these projects are developed in accordance with the principles of urban transformation, it should be expected to contribute to social development and economic development as well as to increase the quality of space and life in the city.

4.7.5 General Characteristics of the Urban Transformation Project of Erbil Old Town and The goal of the project

Under the name of Erbil Old Town Region rehabilitation of the ancient Erbil citadel Project; Urban transformation project is carried out in and around the historical castle. Within the scope of the Rehabilitation of the ancient Erbil citadel Project, Delal Khana was demolished and replaced with a square and parking area.

Fig 4.30: Delal Khane 2009 (left) and Shar Garden square 2011(right), URL[34]

The historic castle is home to many historical monuments. Arab, Taajeel and Khanaqa the neighborhoods constitute the first settlement area after the historical citadel and areas with historical significance. The land was given to the owners as a concession to the residents due to the work of the historical Erbil castle and surrounding area.

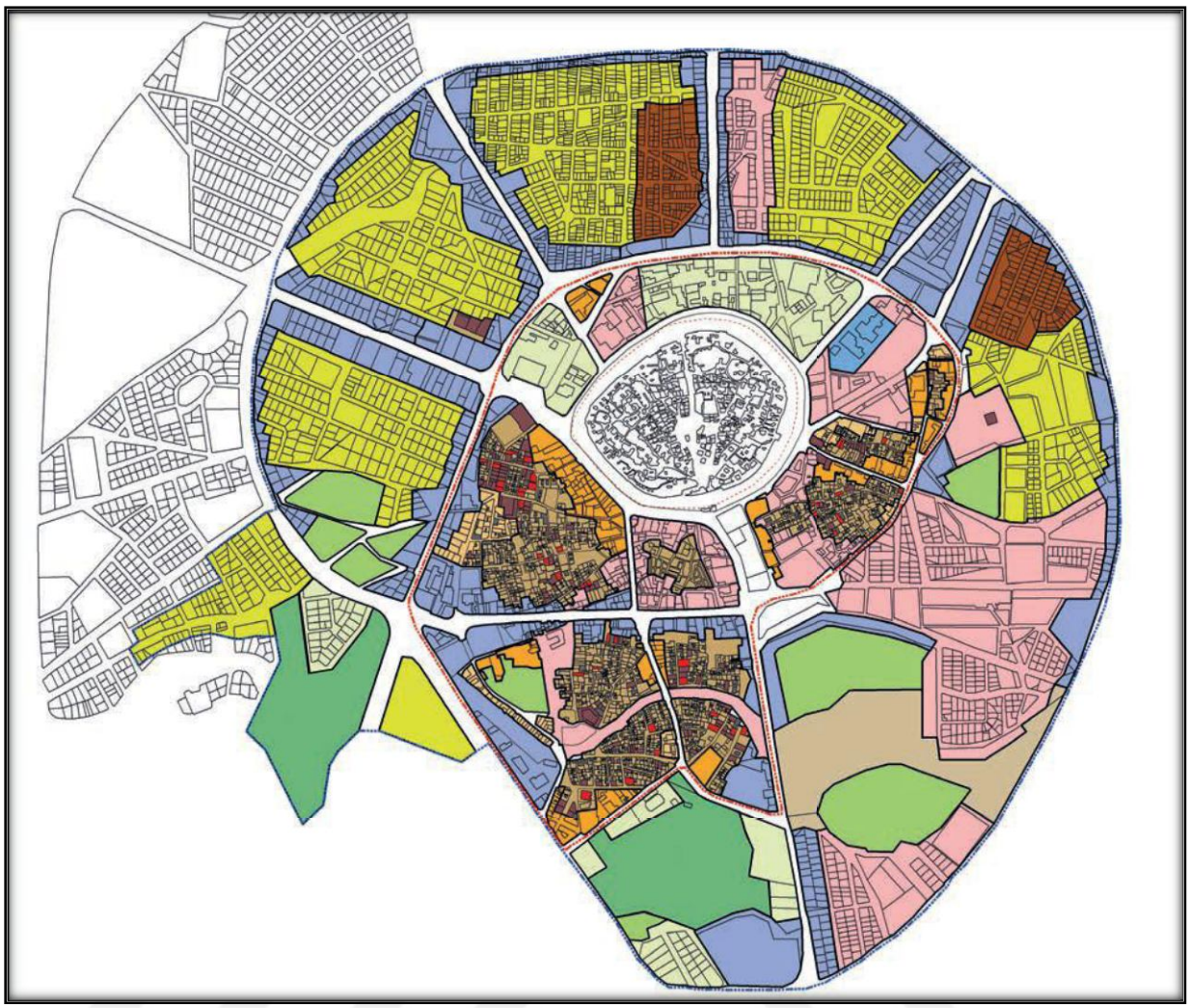


Fig 4.31: Planning areas of the buffer zone of Erbil Citadel, (Nomination of Erbil Citadel 2011)

Erbil has been undergoing major transformations particularly since the fall of the previous regime in 2003. The restoration and preservation of the Arbil citadel, a UNESCO (United Nations Educational, Scientific and Cultural Organization) world heritage site, is an element that will make the historical region and its surroundings very versatile. The goal of the project is also to create a famous tourist area is designed to include coffee shops, hotels and galleries.

Recently, the citadel town has been included as one of the 100 most endangered cultural sites in the world by the World Monument Fund (WMF) in New York. It was included in the UNESCO World Heritage List in 2014 (HCECR 2009).

In 2007, KRG established a commission, The High Commission for Erbil Citadel Revitalization (HCECR), a site management body to restore the historical and cultural significance of the citadel and work on the project is still ongoing. A comprehensive work of all aspects of the history and structure of citadel has been carried out and historical and cultural sustainability of the city will be ensured. Thus, in 2011, the High Commission for Revitalization of Erbil Castle (HCECR) developed a strategy for the archaeological survey in consultation with the Directorate of Antiquities of the Department of Antiquities. When the project is completed, it is aimed to bring it into the foreground in accordance with the historical periods of the buildings in the old town Erbil. There are also historical remains dating back to 6000 years of archaeological excavations. So, it is expected that archaeological investigations could lead to discoveries of fundamental importance. There are many historical monuments in the ruins of Erbil old town and needs to be preserved.

Fig 4.32: Neo-Assyrian tomb (Nomination of Erbil Citadel 2012)

In other words, the area to be transformed in the Erbil old town is a non-historical area and these areas are considered as public spaces, and it is built in historical value has been transformation in original shape. It is possible to foresee that after the transfer of the population living in old town Erbil to another area of the city, it would not be positively beneficial for the urban space to relate to the social life of the urban area of the old town.

Fig 4.33: Erbil Old Town Arab District alleys texture, (Author, Field Work, 2013)

Under the name urban transformation, more planned projects reaching the desired targets problems can be solved. In cooperation with central government and local governments, urban transformation projects should be implemented in a manner that will not offend citizens under the name urban transformation, more planned projects reaching the desired targets problems can be solved. In cooperation with central government and local governments, urban transformation projects should be implemented in a manner that will not offend citizens.

Historical Urban Transformation Project; includes historical buildings and three districts of Arab, Taajeel and Khanaqa neighborhoods. Old town Erbil Urban Transformation Project; the protection strategy in these areas includes protection and improvement of physical touches and structures, the development of social and technical infrastructure, and the decision of revitalization and functional change. Taking protection as a means of creating data to plan in the renovation areas; it is necessary to organize based on the participation of the people in the urban transformation projects and to provide the social benefit within the scope of the project and to develop a fair distribution among the stakeholders in the urban transformation projects.

History together with improvement and improvement strategies in the field of urban conservation it is not enough to resolve this region with only the spatial transformation strategies, but also the problems such as gentrification and the emergence of get unearned income centers that can arise from social and economic transformation are needed. The differences between the regions in the historical city of Erbil and the people living in the

modern urban areas are due to economic, physical, cultural and service differences and these differences are increasing day by day; it creates a socially distinction between the historical region and the people living in other regions. The structures in the historical city form a unique social texture within themselves. This social texture is perceived as a threat in the city. One of the aims of the urban transformation is to remove the danger from the current by breaking down the existing social touch.

The most important reason why people living in historical areas want to stay in this region is their economic and social solidarity, neighborship relations and living traditions. The purpose of urban transformation projects is to plan and live in cities to reach the standards. The people in the region, along with the urban transformation, move to the areas in the city and reveal problems of social adjustment and various deprivations and distance to the city center.

4.7.6. Erbil Old Town Urban Transformation, Effects of the Case Analysis on the Conservation Project

In this part of the study, the possible spatial and socio-economic impacts of the Erbil old town Urban Transformation Project will be given.

4.7.6.1 Spatial effects of the Erbil Old Town Urban Transformation Project

The historical citadel and the Arab, Khanaqa and Taajeel neighborhoods in the urban protected area are included. Historical citadel and surrounding structures are quite intensive with historical texture. However, in this historical area, the later multi-storeyed buildings show a characteristic which is contrary to the historical texture in terms of being an urban protected area.

Fig 4.34: Erbil Old Town Arab District New Structure, (Author, Field Work, 2013)

With the project of conservation of the intensity of constructions, it is aimed that the structures around the historical center will not be more than two floor. Also, the destruction of non-historic buildings in the area will also reduce intensity and image pollution. The transformation works to be done will be transformed into the recreation area and the places for tourism as well as the historical area where the quality of life will rise.

In the direction of the information obtained with the questionnaire application and face-to-face interviews, spatial reflections of the transformation period in the historical Old Town Erbil ; spatial separation, the intensity observed in restoration work, and the increase in project-based renewal work, the proliferation of trade and tourism areas, and the re-evaluation of the historical area along with urban transformation.

4.7.6.2. Socio-cultural effects of the Erbil Old Town Urban Transformation Project

When the socio-cultural structure of the area is examined; the education level of the people in the area seems to low. The high share of the unemployed and low-income segment in the total is also a socio-cultural problem. This socio-cultural structure on the periphery this shows that the region is behind socio-cultural maintenance.

With the implementation of the urban transformation project in the area, it is aimed to turn the historic Erbil region into an attraction center and with renovation and restoration work to be done on the area, this area will be a center of attraction for people who want to come from other settlements. At the same time the urban transformation project in the

area will allow for the development of social changes. The creation of new trade centers and tourist areas within the area will help the region become a recognized center. The increase in attractiveness in the area will cause the values of the buildings in these areas and the rental rates to rise. The people in the area were removed from the area and placed in new settlements. Those who have to abandon their settlement areas are forced to adapt to the changing social cultural atmosphere of their former owners.

It will have a new socio-cultural identity, changing socio-cultural structure in the area. People living in the Erbil old town are expected to face new poverty problems due to their social adjustment problems, even though their lives will continue, in these new habitats, because neighborhood and kinship relations are left in the middle and away from the city center.

In the direction of information gathered by survey application and face-to-face interview, social reflections of the process in history; it is expected that positive effects such as the change of the established people, the increase of activities, the strengthening of urban conservation consciousness, the increase of project-based practices and the strengthening of the tendency of protection of the end of the region as the ownership of the local people are expected.

4.7.6.3 Economic effects of the Erbil Old Town Urban Transformation Project

It is obvious that the poor and unemployed people in urban estates in historical Erbil city can not adapt to the socio-economic environment after the project. For persons are moving away from their living space, socio-economic conditions should be presented with new living space options. With the transformation and conservation project made on the area is determined that there is an increase in the demand for values. In addition, people who settled in the new area by leaving the area is a difficulty in economic conditions in an area far from the region. The influence of the reciprocal interaction and the transformation of the environment directly affects not only economic but also political process and socio-cultural structure.

The transformation project has revealed that new structures will increase in the area and that new enterprises will have an effect in the area selection activities in the region. In addition, unhealthy houses in the region will be emptied, renovated areas will become an attraction, environmental pollution and other negative factors will be reduced. Urban

transformation in the area of planning will have the most significant impacts, valuation of the region, increase in land and housing prices compared to the surrounding settlements, healthy buildings and increase in the quality of the environment.

4.8. Morphological Analysis

Morphological analysis of the historical city of Erbil will be evaluated under"visual analysis".

4.8.1. Visual Analysis

Visual analysis is covered under three titles: old maps and plans, aerial photographs and drawings.

4.8.1.1. Morphological analysis based on old maps and plans

The spatial organization of the historical city of Erbil, is based on the Assyrian period. In city planning, organic forms and irregular blocks are dominate. through old maps and plans in the evaluations made; It is seen that the development of the city was experienced in the Ottoman period and later. The initial expansion of the city of Erbil from the Citadel's mound to the plain started to the south of the Citadel's main gate during the sixth century, twelfth century AD. The main cause was the lack of adequate space for further expansion within the limits of the Citadel. The first construction to be built was the new Arcade (Qaysarieya). Later, three new residential areas surrounding the commercial area were developed; the quarter of Khanaqa was located to the southeast of the Citadel, and the quarters of Tajeel and Arap to the south.

In the 50's and 60's the city of Erbil experienced a great expansion. The reason for city growth a relatively economic prosperity and a change in social and cultural traditions. During these years, many detached houses were built beyond the second ring road (Minara, Mustawfi, Khanaqa north).

The road network of the City of Erbil became bigger in circles surrounding the Citadel. Several radial roads cross these circles. Qalaa Street was the first ring road to be built. In the forties and fifties the second and third ring road were constructed. The city's main shopping and civic center lies between these two roads. In the mid-sixties the fourth ring road was built (Hassan 1987) .

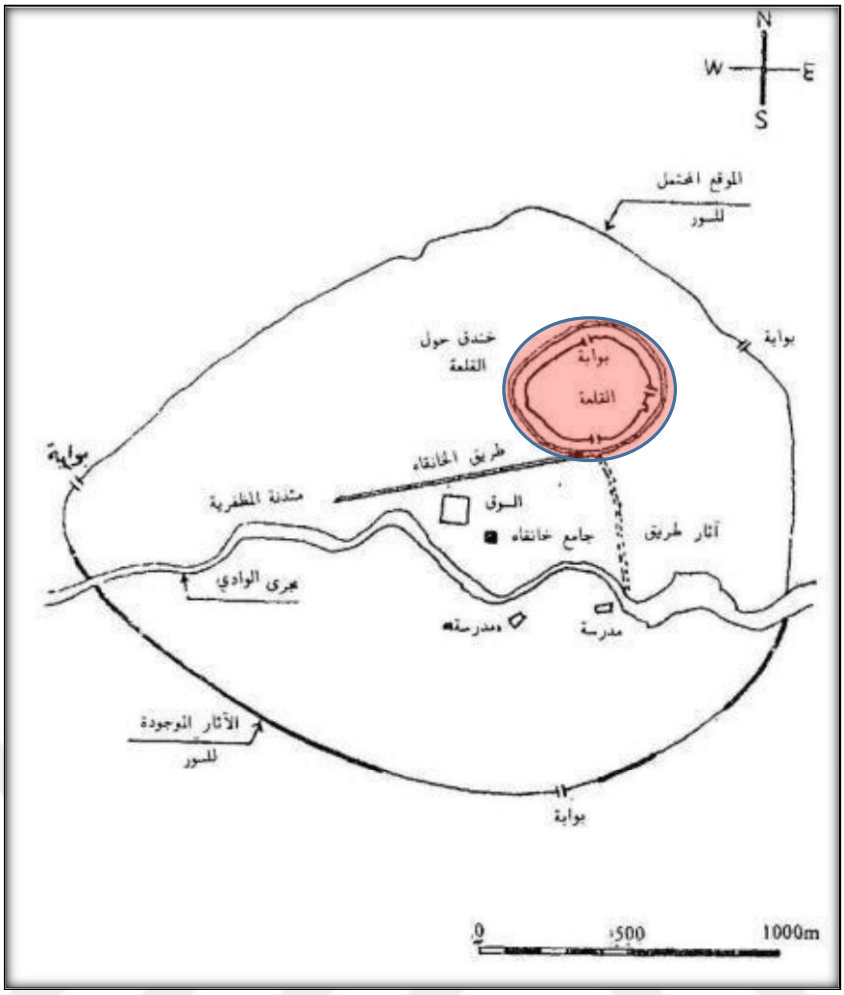


Fig 4.35: The Erbil citadel and surroundings area in 1232 (Ministry of Municipalities General Directorate of Planning and Engineering 2016)

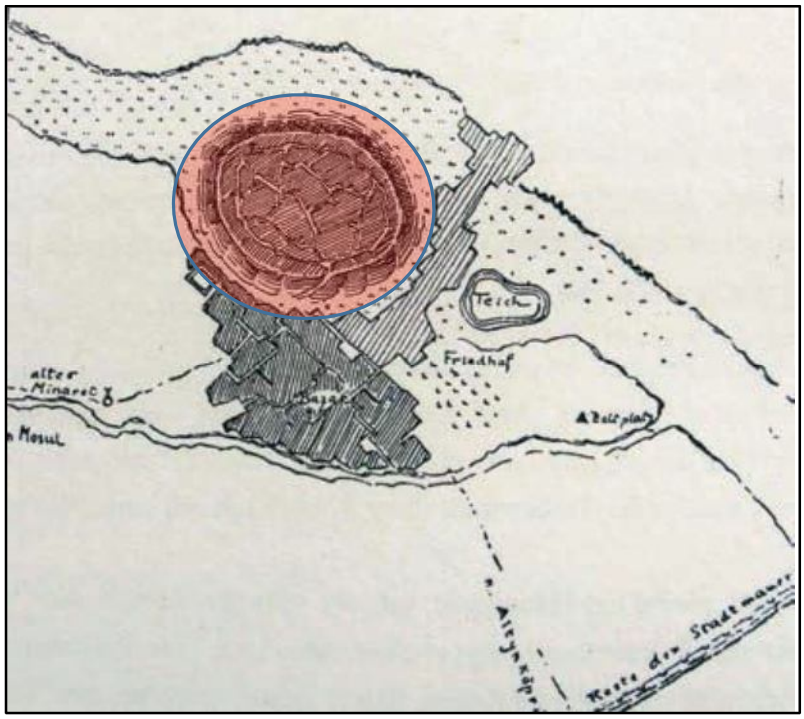


Fig 4.36: Sketch map of Erbil city, c. 1907-8, (Sarre and Herzfeld, 1920)

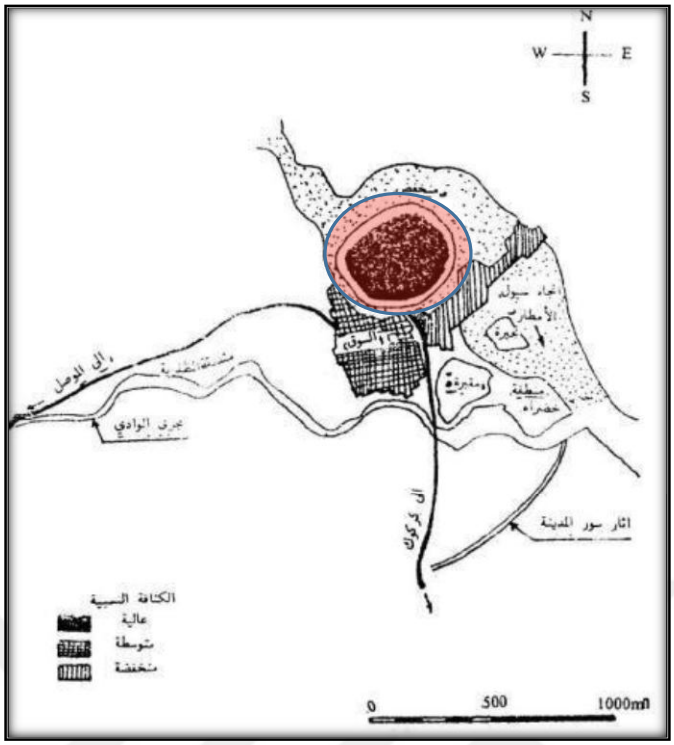


Fig 4.37: The Erbil citadel and surroundings area in 1916, (Ministry of Municipalities General Directorate of Planning and Engineering 2016)

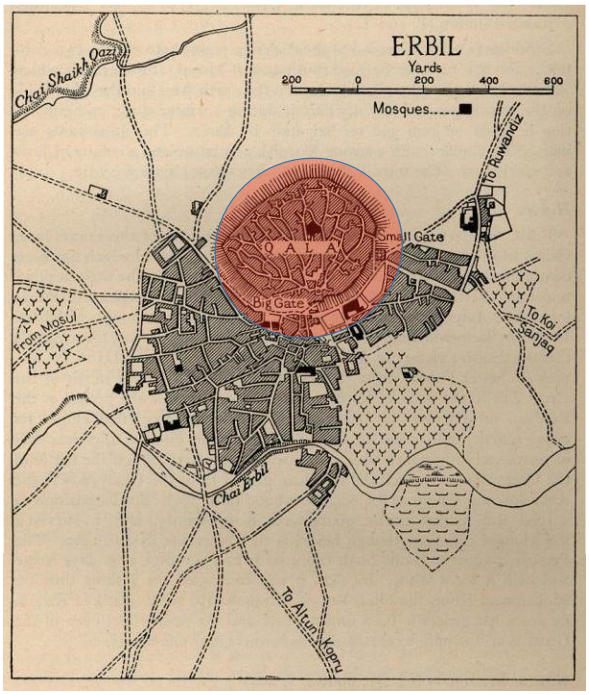


Fig 4.38: The Erbil citadel and surroundings area in 1944, (Britain. and Division. 1944)

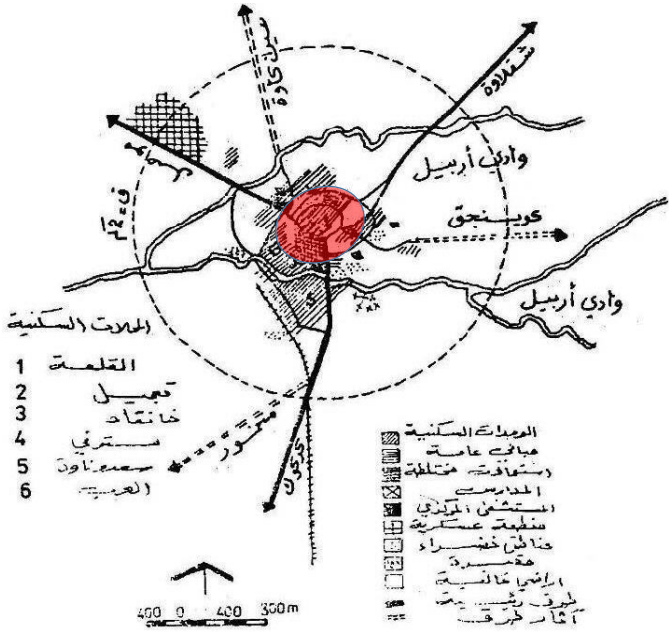


Fig 4.39: The Erbil citadel and surroundings area in 1950, (Ministry of Municipalities General Directorate of Planning and Engineering 2016)

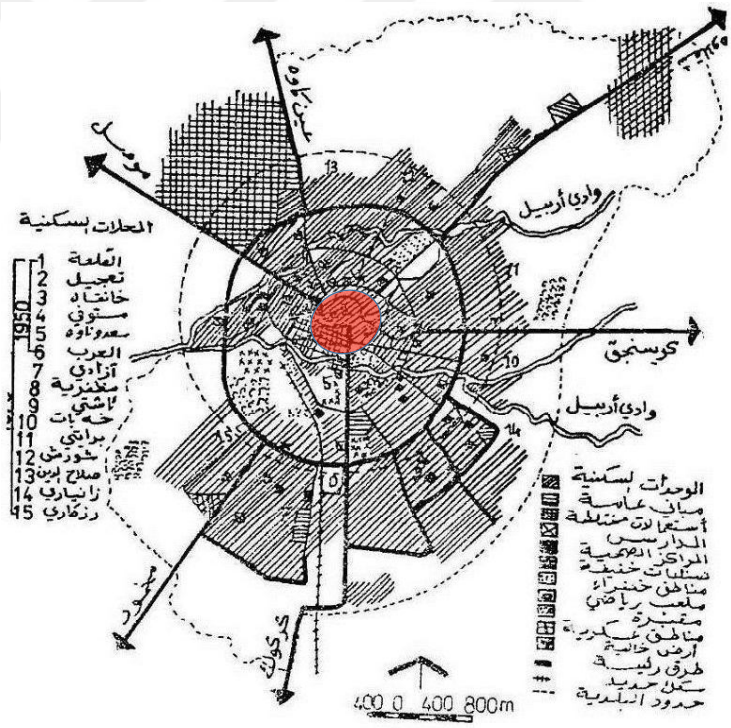


Fig 4.40: Erbil City in 1975 the concentric pattern here has been almost define, (Ministry of Municipalities General Directorate of Planning and Engineering 2016)

4.8.2 Morphological analysis of aerial photographs

When look at the urban changes of the historical city of Erbil in the historical process different political, economic, social and cultural factors played a major role in the development of the city. But the urban development has not destroyed the urban fabric in the historical city of Erbil and preserved its original state. The later development was around the old town of Erbil and the grid planning was applied. The road from the Ottoman era and surrounded the citadel constitutes the transportation backbone of the old city. It is seen radial and linear road textures are formed under the influence of the grid plan formed by the developing city.

Fig 4.41: Organic Texture, (URL[35])

Fig 4.42: Grid texture, (URL[36])

Fig 4.43: Radial roads, (URL[37])

Fig 4.44: Newly developing city, (URL[38])

Citadel is the biggest element in the formation of the city plan. A large part of the city's organic structure was formed during the ottoman period. Especially because of the development of the castle and its surroundings in the old historic district is seen radial road texture.

4.8.3 Morphological analysis through drawings

The citadel has a massive complex of buildings and narrow alleys and streets enclosed by walls. In the old city of Erbil urban web and urban block (Cohen 1998), compared with the drawings on the existing maps and the old picture-photographs. As a result of evaluations based on the road textures. The old historic city has an organic structure and therefore the roads are narrower and more the dead-end streets. Old historical city the organic pattern of the pedestrian alleyway system was a logical functional solution to the circulation of human movement. But the roads in the newly developing city are wider and there is an infrastructure system (Cohen 1998). In 1958, a main road was built through the citadel and divided the town into two parts to provide automobile access. The construction of the road let to destruction of many of houses. When the occupancy rates of the plot within the planning area boundaries are taken into account, it is seen that the vacant parcels which are full of the parcels are less. Due to the fact that the region is a traditional city center, the number of empty lots in the whole area is less Most of these parcels are destroyed and removed from the structure.

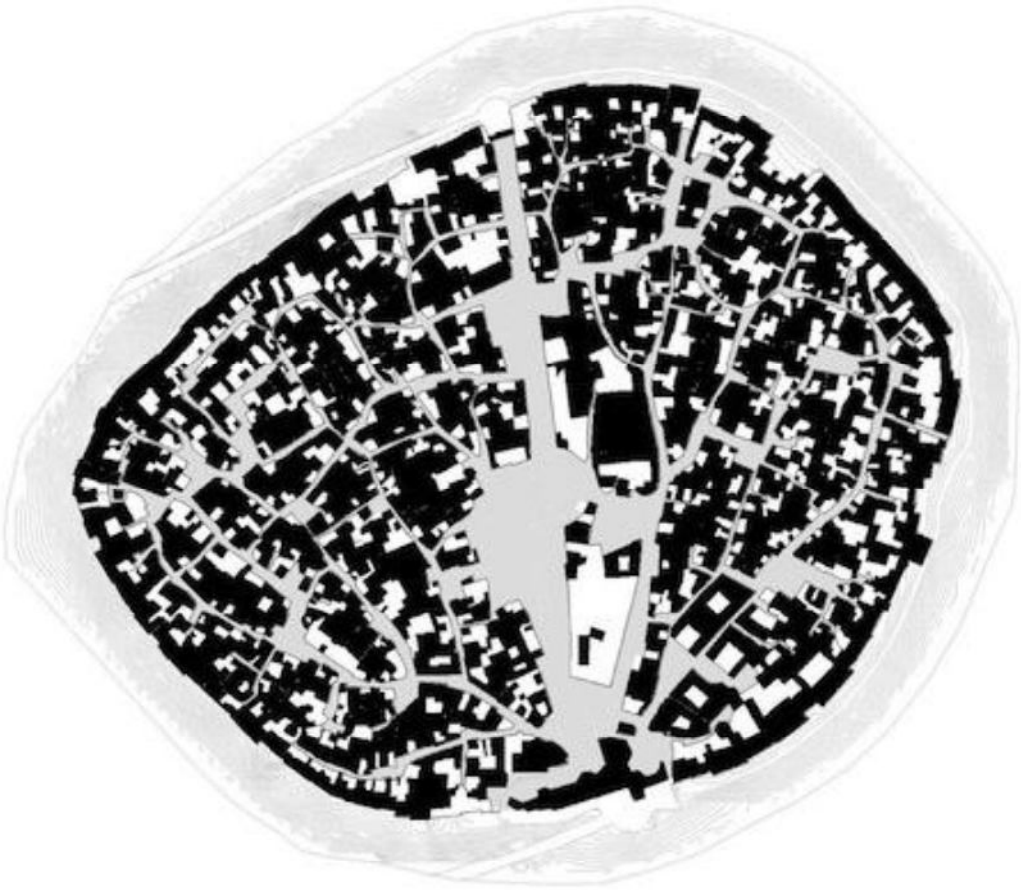


Fig 4.45: Urban web and Urban block, (URL[39])

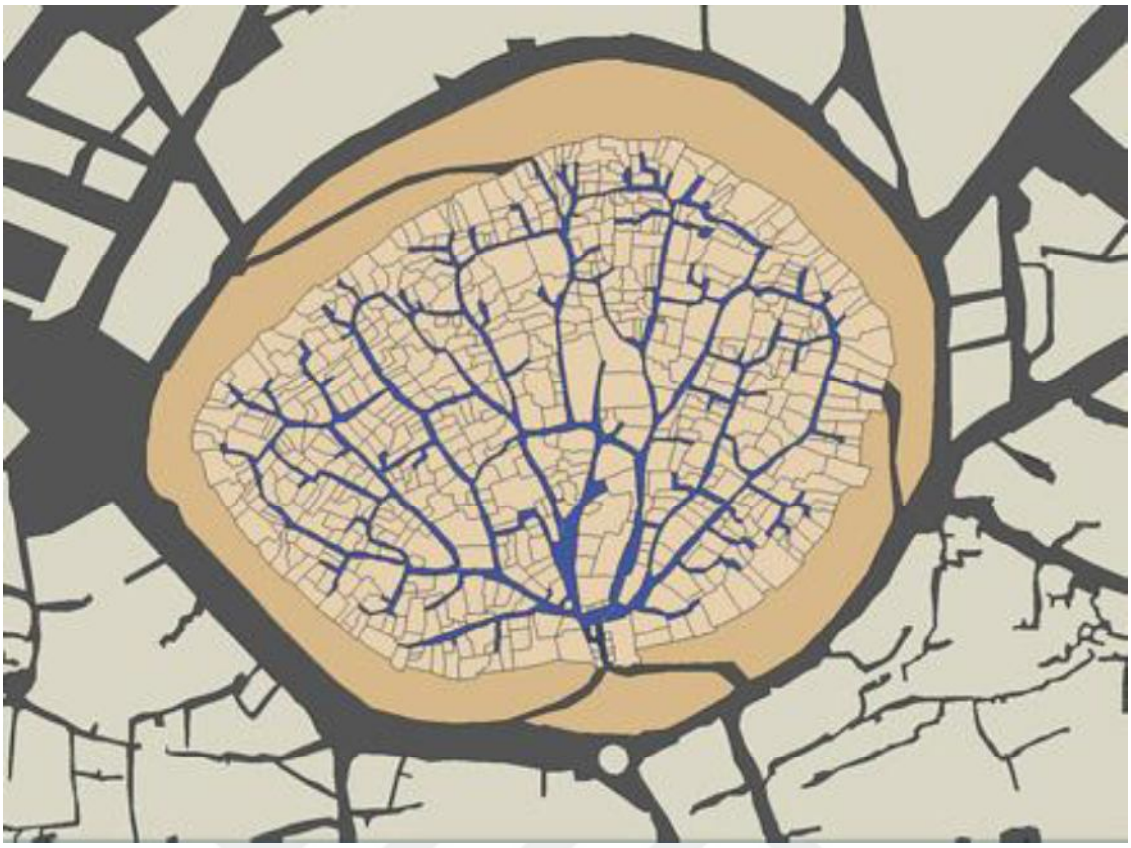


Fig 4.46: Alleyway direction plan, (URL[40])

5. CONCLUSION

Today, with the development of technology and the rise of culture level the importance of protection is increasing day by day. With the incorporation of historical texture into the world heritage, the effects of the country and world economy and cultural development are also better understood over time. Cities are living organisms as social living spaces and change over time. Erbil has a history of 6000 years old history dating back to the past.

The interest in tourism, especially cultural tourism, is at the forefront has increased the interest and protection of the areas. People come to these areas to see, learn and feel what belongs to the old historical places. In this study, the results of the renovation work applied in the protection of the historical city of Erbil have been revealed. The transformation work initiated by UNESCO in 2007 is an important step for the repair and maintenance of the historic city of Erbil.

Especially in the developed world, the concept of urban transformation, which can be applied in various forms and techniques in developed western countries, has become a necessity for healthy and sustainable cities. The main aim of urban transformation can be described as restoring the unhealthy city parts that have economic, social and physical problems and getting them to the city.

There is an important conservation understanding in the world and the history of Erbil city is included in this process and included in the world heritage list in 2014.The general aim of this study is to discuss the urban transformation plan of the city of Erbil, how it affects the social, cultural and economic of Erbil city. Historical urban centers in the cities, despite their historical heritage, have become unable to meet their urban needs over time and have become more inclined to leave. This has led to the desire to revitalize old city centers and gain them to the city. With urban transformation projects, it is ensured that the problem areas are restored to the city as well as the protection and rehabilitation of the cities. The Revitalization Project of Erbil Citadel which is one of the important historical areas in terms of urban transformation project, is the subject of the study.

The realization processes of urban transformations and the relation with the socio-spatial structure are put into practice with different models. The transformations we can call renovation, revitalization, gentrification and restoration are mainly depressed areas in the city center. The great change called globalization also affects city form.

It is seen that integrated with the historical city with its renovation project and housed and maintained in a holistic perspective and comprehensive strategies. It is important to contribute to the analysis and planning of the area in terms of spatial, social and economic dimensions and the preservation of historical centers.

People living in the region should be treated as a natural behavior against the transformation practices that will take place where they live for many years. but the solution is to persuade the society and to make the society aware of the implementation of transformation and to own the project. Ownership to adopt in the area of transformation is important for the sustainability of the project. Without a solution to their problems, the alienated and excluded area, mostly in the low income group, new social they are faced

with problems. Along with the urban transformation, homeowners are changing their lives and moving all their problems to different parts of the city. Thus, the problems are becoming unsolved.

One of the most important problems encountered in the urban transformation project of the old town Erbil city is the difficulty of completely changing social structure with spatial change. In the urban transformation project of the old town Erbil, first of all it should be the basic principle of the project success that the survivors living there do not suffer. The resident owners are entitled to be persuaded and assigned to the new land the living conditions must be at a high level.

Due to the low environmental quality of the area to be refurbished and the lack of care of old buildings, the intensity of environmental pollution has a negative effect on the users of the area. Thus is necessary for the people to be conscious of protecting the historical buildings. Various organizations and seminars should be organized for the formation of the conservation consciousness of the people in the historical areas.

It has emerged that central and local governments have adopted a comprehensive and integrated approach to the urban transformation project in the historic area. Urban transformation should not only be considered as spatial transformation but also in terms of socio-economic and cultural characteristics. Urban transformation in Erbil old town is necessary to reduce the negativities that will arise most, but not to transform the physical-particle planning concept, but also to integrate the social and economic planning needs to be addressed with an approach.

The urban transformation project in the old town of Erbil, the people living in the renovation area has also been seen that there is transformation in their lives. The separation of people living in the renovation area from their habitats has led to a change of lifestyles and working. Particularly in the historic Erbil region, people with low income levels are forced to live far away from the city in a living area that they have never used before; they seem to have moved away from their job opportunities, social and cultural environments and their relationship with their spatial habits.

With this study, spatial and socio-economic effects of urban regeneration in planning area have been tried to be revealed. With urban planning, the urban transformation project has been applied at a rate of 60%, so it is not possible to observe many effects clearly. the local government has taken steps to create comprehensive planning initiatives, focusing

on the long-term future plans of the city and working to reduce the social and economic impacts on the locals. The activities and facilities of the area centered on the renovation of the area were provided and the aim was to attract a wide range of visitors and residents of the region. It is important to make a sustainable assessment of the city for its long-term success. This research could jeopardize the social and economic conditions of the local people, with positive effects such as the renovation of the historical city of Erbil by the UNESCO world heritage list, as well as the promotion of regional heritage tourism and the city center's redevelopment opportunities.

However, in the transformation project, when the works are associated with the settlements, the impact assessment process is not completed in the projects. It is aimed to provide sustainability with the residents of this historic area through the urban transformation project in an environment with important historic values such as historical old town of Erbil. The biggest deficiency is that urban transformation in old town Erbil is perceived only as a change of the physical structure of the city. The work to be done must be taken into consideration with the people living in the city. The projects to be created in this direction should be designed to solve the problems of the people of the region, it should not be to earn unearned income. In other words, in the transformation areas, the projects should not only look at economic but also social aspects should be kept in front.

In the answers to the problems that are anticipated in the renovation works, the problems of the transformation are generally reduced to the transformation of the physical space and the social, economic and environmental dimensions of the transformation are ignored. Yet urban transformation can be successful if it is addressed through a comprehensive and integrated approach, with the transformation of the physical space as well as the social development, economic development, environmental protection and sustainability of the natural equilibrium.

With the urban transformation project is seen that the change in the areas progressed positively. It is important in terms of preserving historic texture that the multi-storey buildings around the historical castle will be two floor after the project. Also prevents the urban skyline from deteriorating. In addition, the destroyed historic buildings in the historical city of Erbil has been built with its own unique architecture. At the same time, it was re-evaluated as a non-historical area in the region, a public recreation area and a

city park. Include in the project, residents living in the houses were removed from their homes and the land which is far from the center as compensation is allocated. But the infrastructure of economic and socio-cultural relations is not planned, how people will live in a new region. The project may adversely affect the social relationships in the area.

Together with the beginning of the urban transformation project, the value of the area and the rental rates have increased. The local government and UNESCO are economically stakeholders of the destruction and restoration work to be carried out in the field together with the urban transformation project of the Erbil old town. The transformation project of the historical area will provide both the strength of the economy and the protection of the continual vitality of the environment.

Socio-cultural change after the renovation project can lead to a change in the social structure in the area and the poor people have the possibility to move to new settlement areas in other regions of the city. in other words, urban poverty cannot be abolished by this transformation process, but is shifted only to areas other than certain regions of the city. This problem should be searched for at the outset of planning decisions, rather than searching the contents of the renovation projects of the main cause. The appreciation of morphology helps urban designers become aware of local development patterns and the process of change. The process of changing the urban form of the historic Erbil city through urban morphology has been examined. In this study, an analysis of the historical city of Erbil, which was exposed to the process of change and development on the old and new urban plans.

With the prominence in Erbil's growth, the planning policies and decisions on the city's growth are of great importance. Depending on the planning policies and the decisions taken, the city center maintains its current position. The changing growth axis forms around the city's historic citadel and which represents the heart of the city.

As a result of the evaluations made is seen that the development of the city is the citadel and its surroundings and it is still the center of the city. It is obvious that the old town Erbil is the most important element in shaping the new city in the same way. When the intelligibility values are examined, it is seen that the city that developed over time has a strong connection with the historical city and the structural form of the historical city preserves its original state.

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